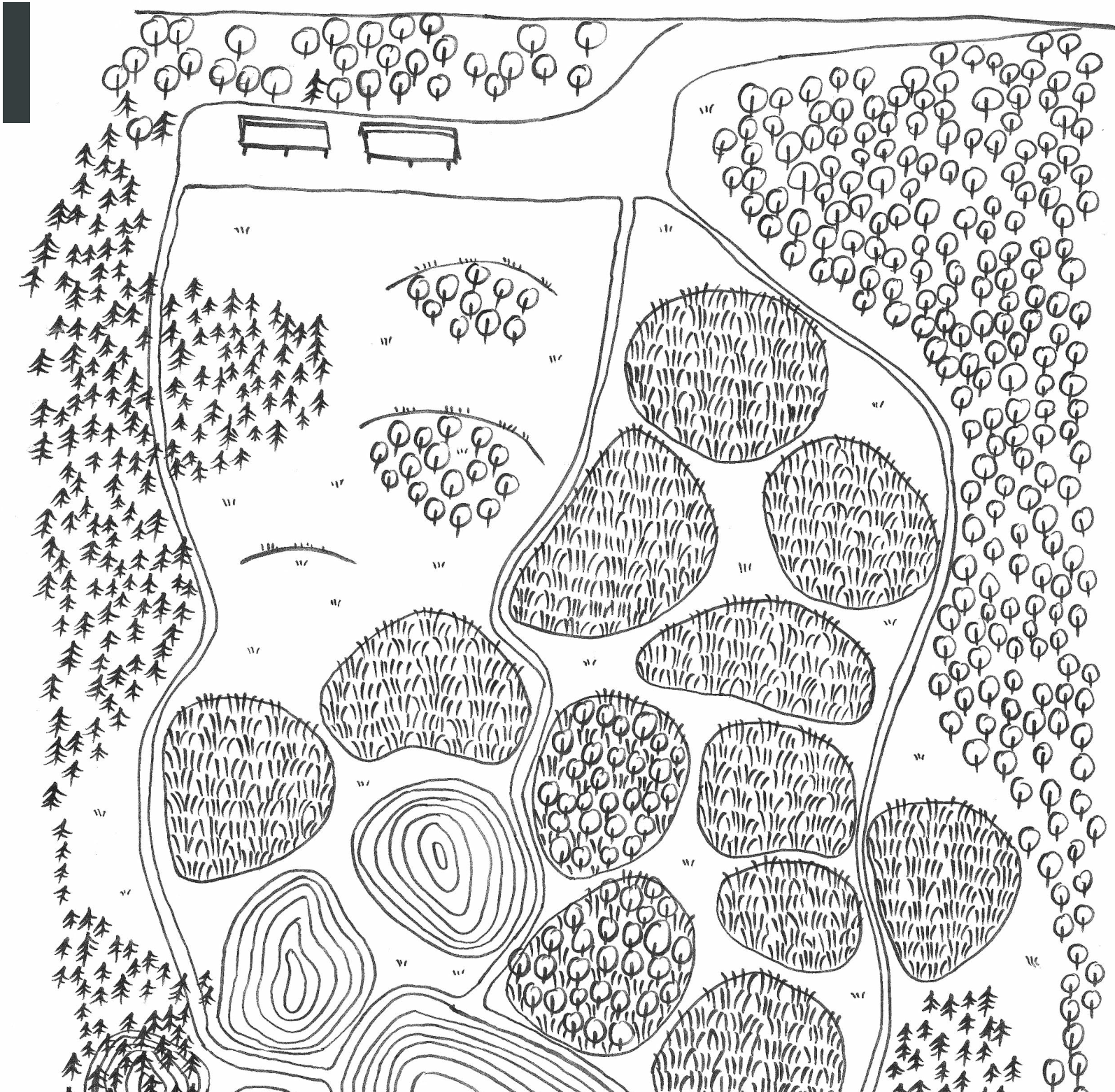

2023
Portfolio

jennifer | qian wan

resume

Jennifer | Qian Wan

########## DM for contact information

Education

MLA The University of Guelph, Landscape Architecture, 2024
Thesis: "Cultural Exchange in Landscape Architecture"
Advisor: Steven Clarke

BA (HD) The University of Toronto, Specialist in Architectural Studies, 2021
Environmental Studies Minor & French Language Minor

Honors and Awards

SEDRD University Graduate Scholarship	2021, 2022
Dean's List Scholar	2018-2021
U of T Scholars Award	2017
OSSGA 2022 Competition HM	2022

Experience

The University of Guelph Teaching Assistant, SEDRD	January 2022 - Present
The University of Guelph Research Assistant with Prof. James R Taylor	January 2023 - Present
Landscapes | Paysages Editorial Board Student Intern	January 2022 - Present
Ground Magazine Editorial Board Member and Contributor	January 2022 - Present
Stantec Archaeology Field Tech, Health & Safety Rep	May-August 2022
Hart House Demo Magazine Graphic Designer & Design Editor	Sep 2017 - May 2021
Applied Architecture, Landscape, & Design Exec Team – Marketing Director	Sep 2019 - June 2021

about.

I'm a 2nd MLA student who loves nature and working with people. In my academic and professional experience, I have gained expertise in architectural and environmental design, and aim to use artistic and technical skills to create inspiring and societally beneficial projects. I'm currently working on my thesis "Cultural Exchange in Landscape Architecture".

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Cambridge Butterfly Conservatory 8

Windom Bowl 12

Wetland Conservation 14

Yorkville Urban Forest 16

Undergraduate Studios 18

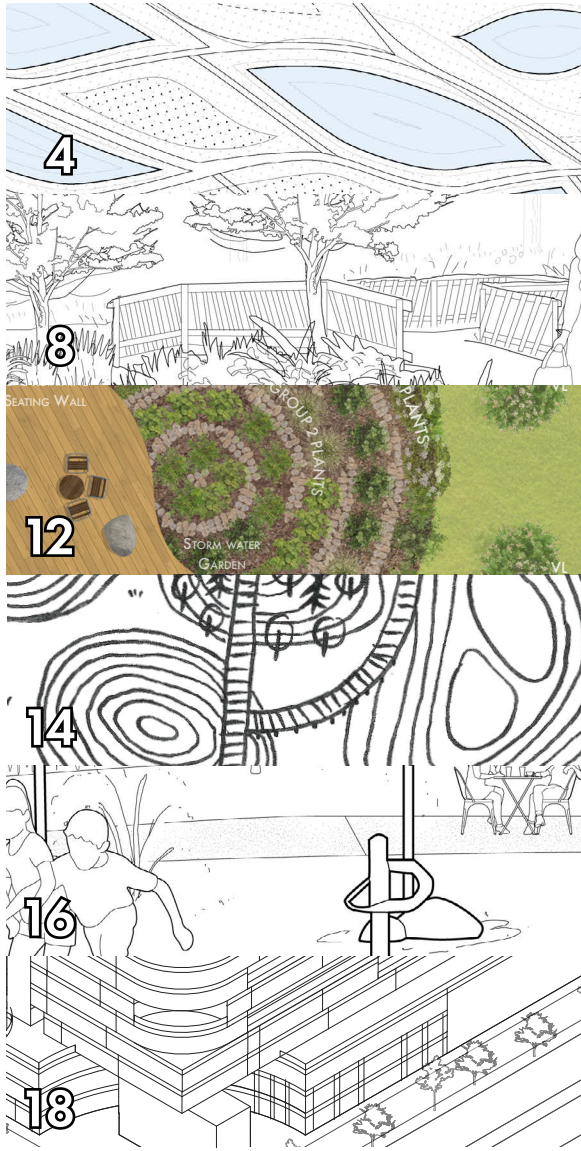


table of contents

riparian wetland garden-

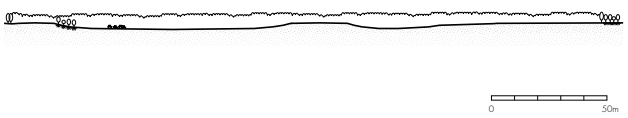
gravel pit rehabilitation - individual - April 2022

RIPARIAN WETLAND GARDEN

EXISTING CONDITIONS

PIT INFORMATION:
Waynco Gravel Pit
Lot 1 East of Grand River
Concession 9
North Dumfries, Waterloo

Located just south of the City of Cambridge, Waynco Ltd's Lot 1 is an inactive gravel pit that has been rehabilitated since the end of its extraction period. These drawings show the pit's relation to surrounding residential and industrial areas as well as large bodies of water such as the Grand River.



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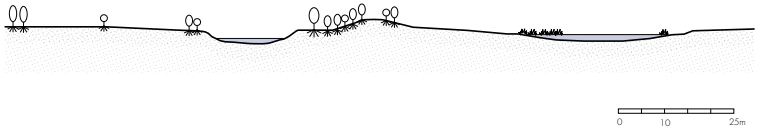

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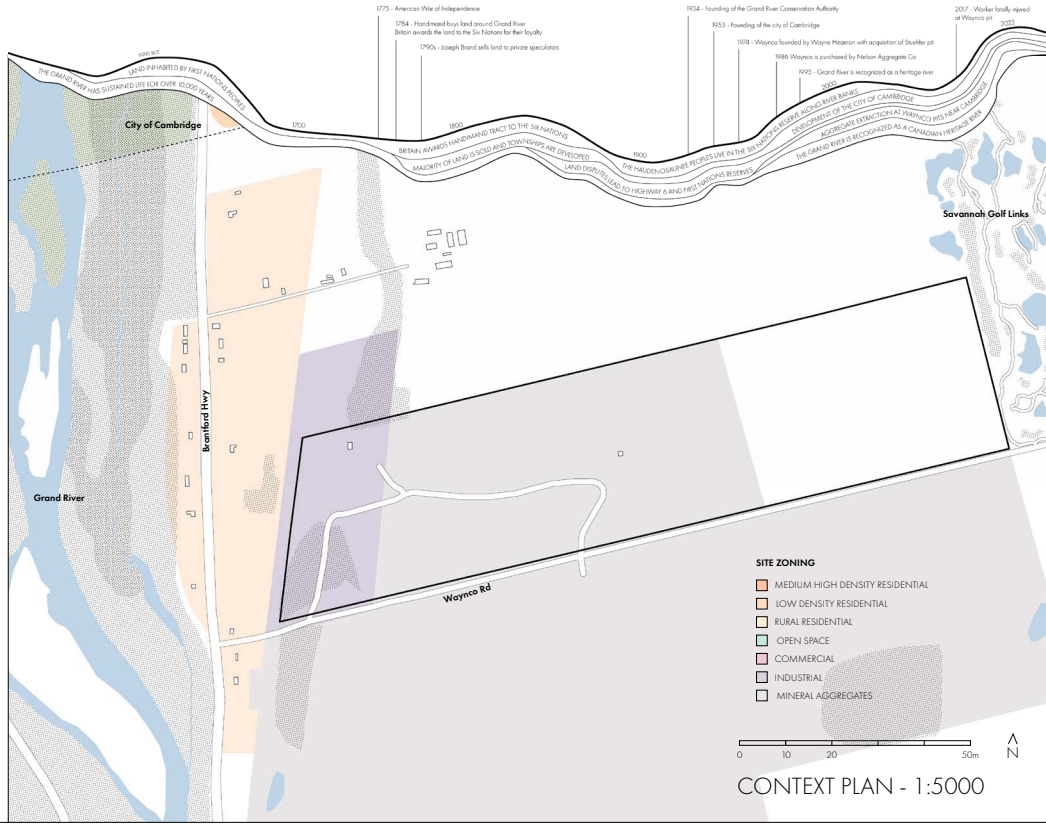

1775 - American War of Independence
1784 - Handimand buys land around Grand River
Britain awards the land to the Six Nations for their loyalty
1790s - Joseph Brand sells land to private speculators
1934 - Founding of the Grand River Conservation Authority
1955 - Founding of the city of Cambridge
1974 - Waynco founded by Wayne Meamon with acquisition of Stuehler pit
1986 Waynco is purchased by Nelson Aggregate Co.
1995 - Grand River is recognized as a heritage river
2017 - Worker fatally injured at Waynco pit
2022
LAND INHABITED BY FIRST NATIONS PEOPLES
THE GRAND RIVER HAS SUSTAINED LIFE FOR OVER 10,000 YEARS
1700
1800
1900
2000
BRITAIN AWARDS HALDIMAND TRACT TO THE SIX NATIONS
MAJORITY OF LAND IS SOLD AND TOWNSHIPS ARE DEVELOPED
LAND DISPUTES LEAD TO HIGHWAY 6 AND FIRST NATIONS RESERVES
THE HAUDENOSAUNEE PEOPLES LIVE IN THE SIX GRAND RIVER NATIONS RESERVES
DEVELOPMENT OF THE CITY OF CAMBRIDGE
AGGREGATE EXTRACTION AT WAYNCO PITS NEAR CAMBRIDGE
THE GRAND RIVER IS RECOGNIZED AS A CANADIAN HERITAGE RIVER
City of Cambridge
Brantford Hwy
Grand River
Waynco Rd
Savannah Golf Links
SITE ZONING
MEDIUM HIGH DENSITY RESIDENTIAL
LOW DENSITY RESIDENTIAL
RURAL RESIDENTIAL
OPEN SPACE
COMMERCIAL
INDUSTRIAL
MINERAL AGGREGATES
0
10
20
50m
N

CONTEXT PLAN - 1:5000

SITE PLAN - EXISTING CONDITIONS 1:3000

KEYPLAN, NEIGHBORING PITS - 1:50,000

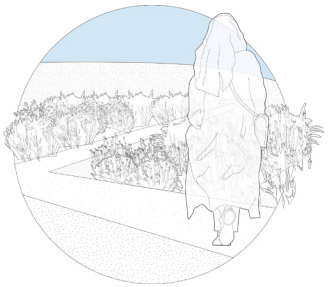
OSSGA competition boards.

These design boards were submitted to the OSSGA student competition.

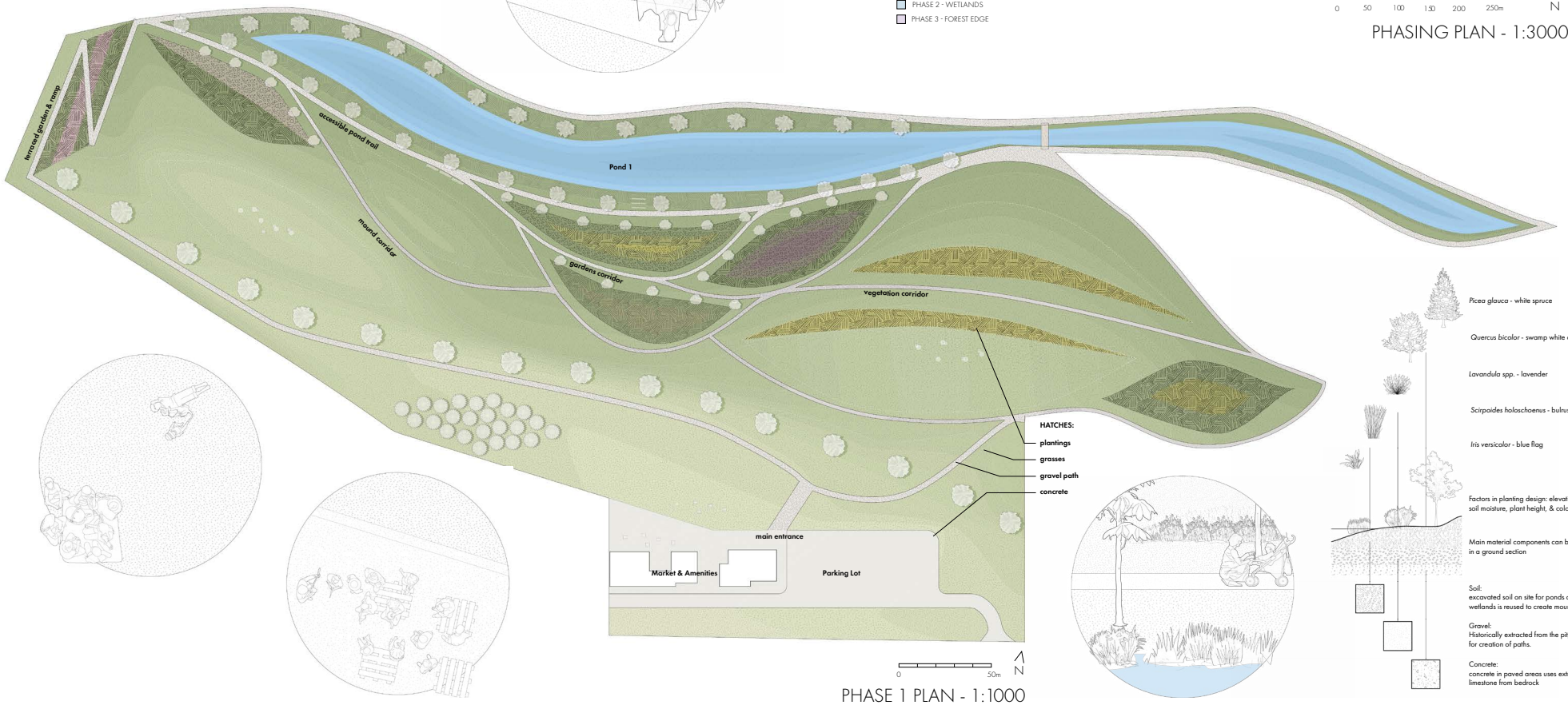
RIPARIAN WETLAND GARDEN

PROGRESSIVE DEVELOPMENT

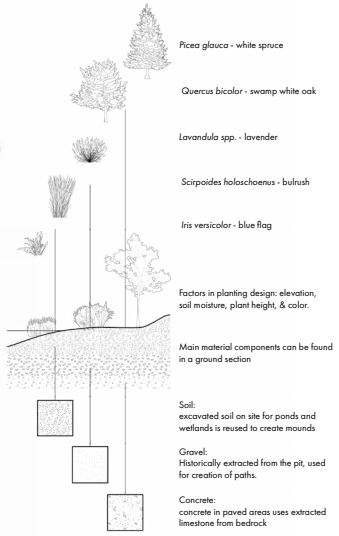
This panel addresses the progressive redevelopment of the pit as it has already been rehabilitated. The Riparian Wetland Garden design (next panel) follows a construction schedule of three phases, starting with the main pond trail and entrance, then the smaller elements and outer edges of the site. The construction of ponds and landforms also recycles material through extraction and aggregation.



PHASING PLAN - 1:3000



PHASE 1 PLAN - 1:1000

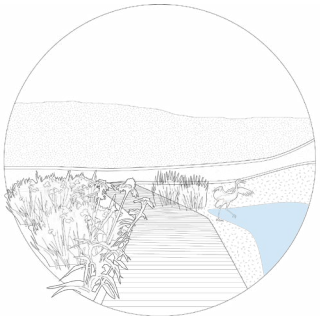

Picea glauca - white spruce
Quercus bicolor - swamp white oak
Lavandula spp. - lavender
Scirpoides holoschoenus - bulrush
Iris versicolor - blue flag
Factors in planting design: elevation, soil moisture, plant height, & color.
Main material components can be found in a ground section
Soil:
excavated soil on site for ponds and wetlands is reused to create mounds
Gravel:
Historically extracted from the pit, used for creation of paths.
Concrete:
concrete in paved areas uses extracted limestone from bedrock

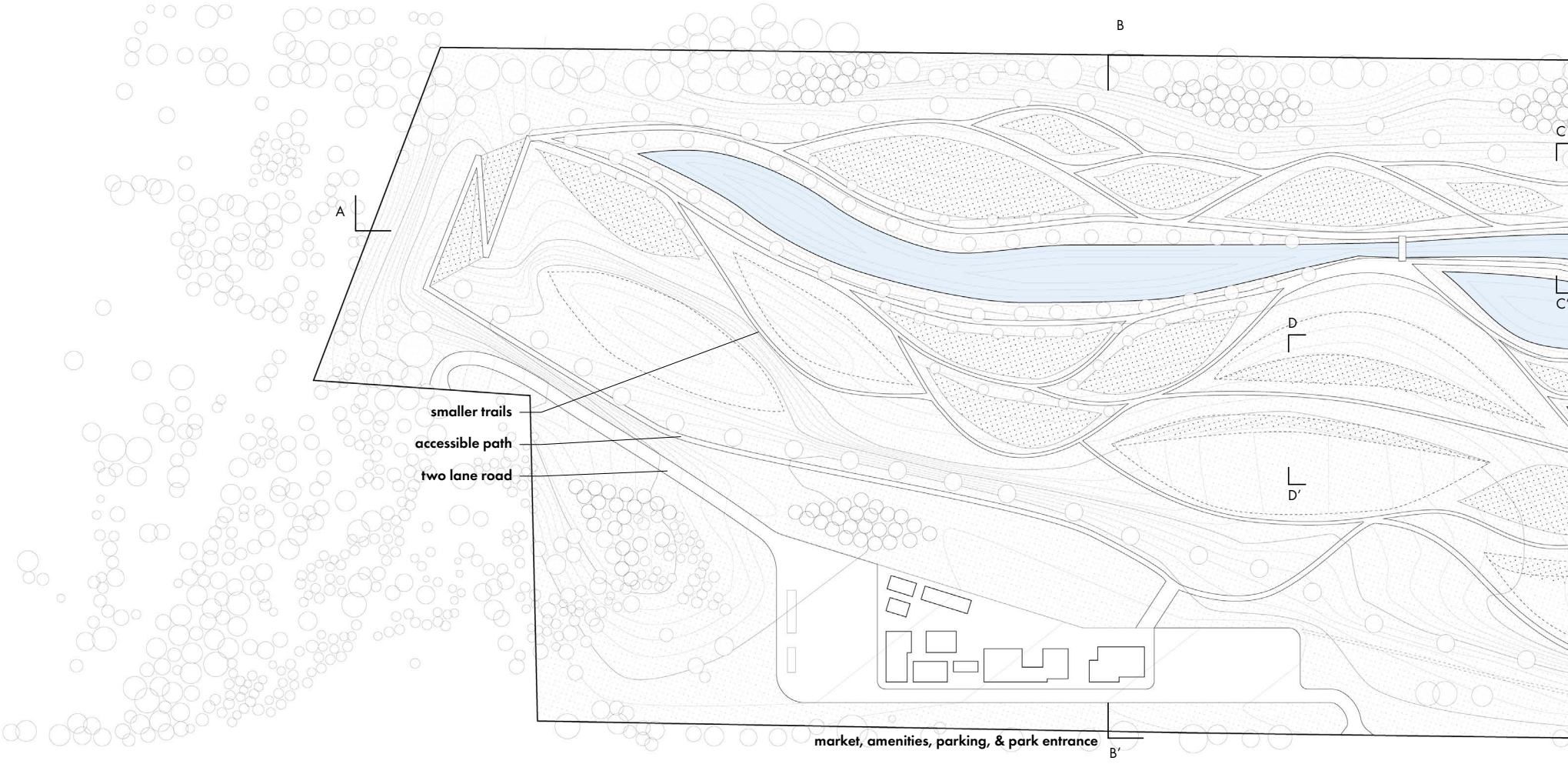
riparian wetland garden.

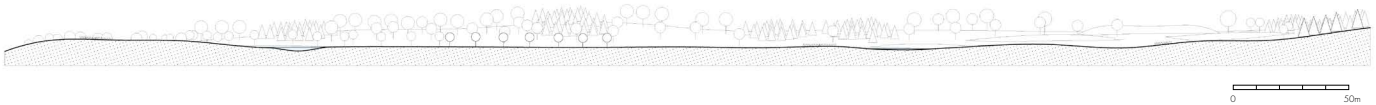
FINAL DEVELOPMENT

The Riparian Wetland Garden is a transformation of the Waynco Pit that takes inspiration from the Grand River and the landforms that appear with healthy river development. The circulation follows the pattern of a "braided" river, creating a series of wetlands and grassy berms that call back to the site's history of extraction and aggregation.

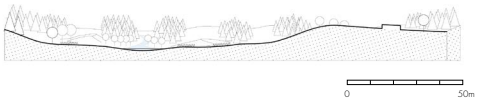
The two entrances to the site lead to a parking and market area, and moving into the site there is a gradual transition in elevation, with a main path around the site and the main pond, and smaller paths leading into the plantings, wetlands, and smaller ponds. Lookout mounds, vegetation, and trees create different experiences throughout the site.







SECTION A TO A' - 1:2000



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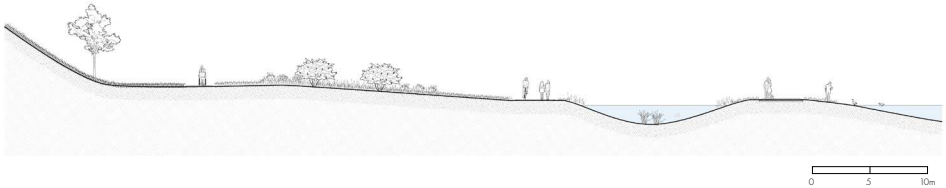
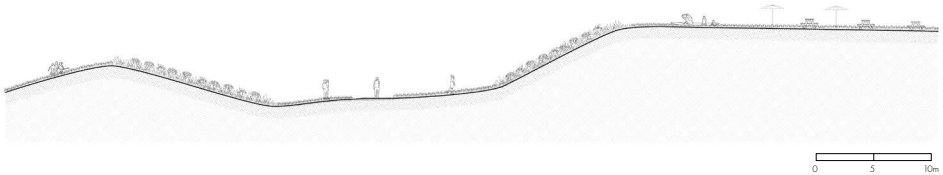


SECTION C-C' - 1:200



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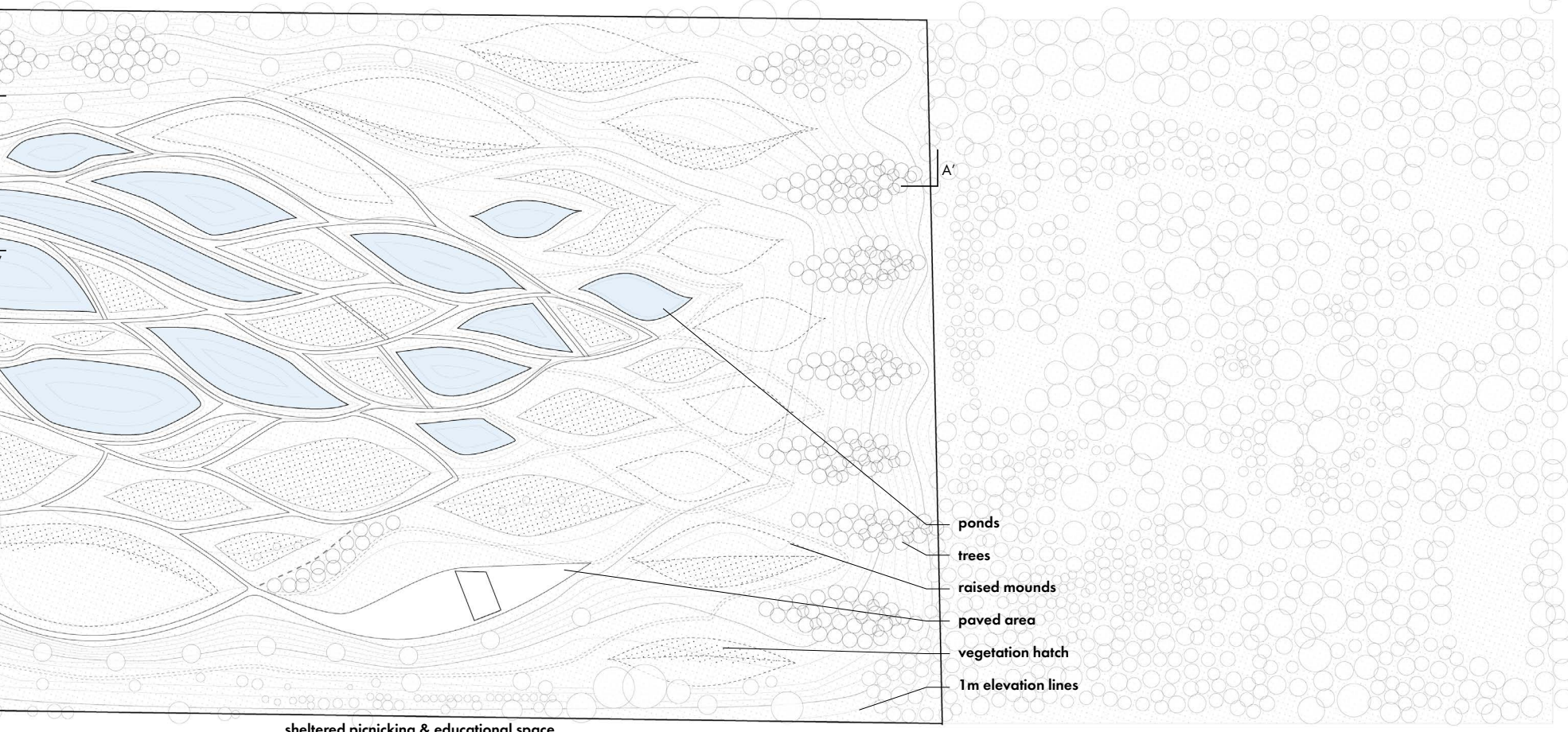
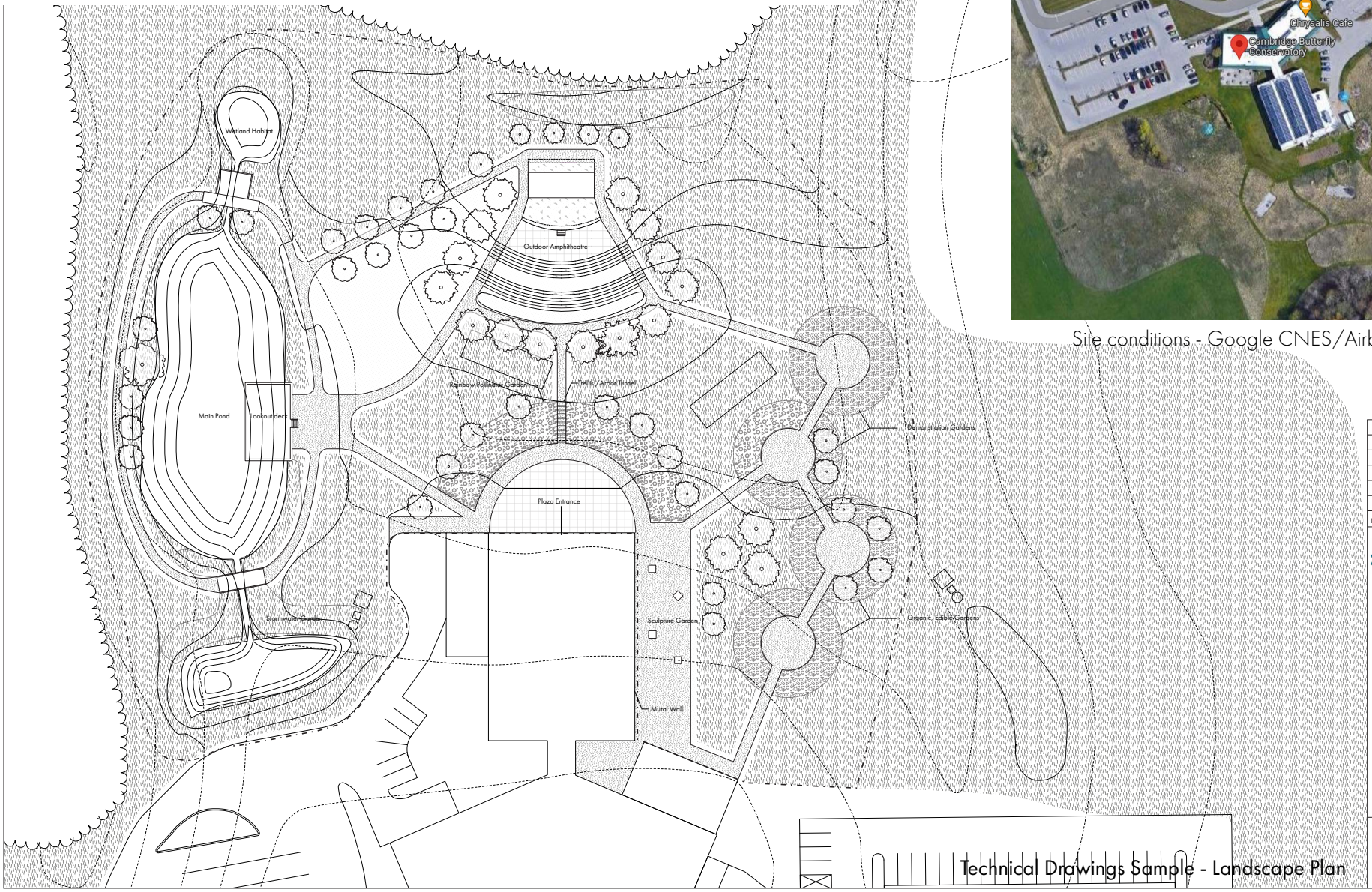


Cambridge Butterfly Conservatory.

studio client project - individual - April 2022

This project is a design for Cambridge Butterfly Conservatory's underused land behind its building. It features a plaza entrance, a pond trail & lookout, a wetland habitat, an ampitheatre, and a series of gardens.
These pages include samples of the technical drawings as well as illustrations for the client presentation.

Site conditions - Google CNES/Airbus Imagery



No.	Revision	Date	By

CAMBRIDGE Butterfly CONSERVATORY

BUTTERFLY POND AND GARDEN

2500 Kossuth Rd, Cambridge, ON N3H 4R7

LARC 6040 JENNIFER'S FIRM

DRAWING TITLE:	Landscape Plan
JOB NO.:	1
DATE:	Mar 21, 2022
DRAWN BY:	JW
CHECKED BY:	-
SCALE:	1:300

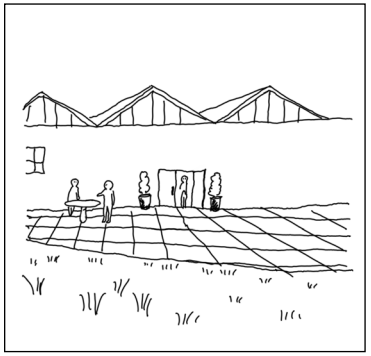
Sheet number

L1.1

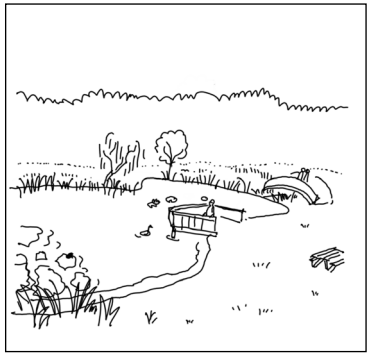
Technical Drawings Sample - Landscape Plan

Concept Sketches: Programming

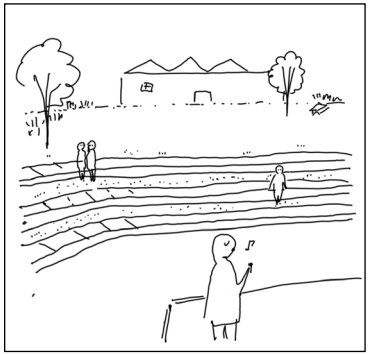
PLAZA ENTRANCE



POND TRAIL & LOOKOUT



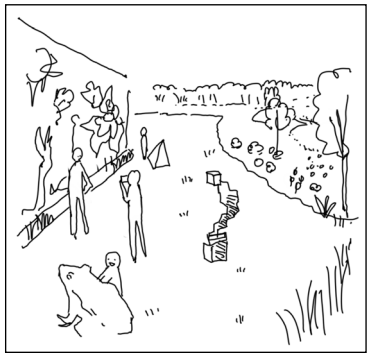
AMPITHEATRE



WETLAND HABITAT

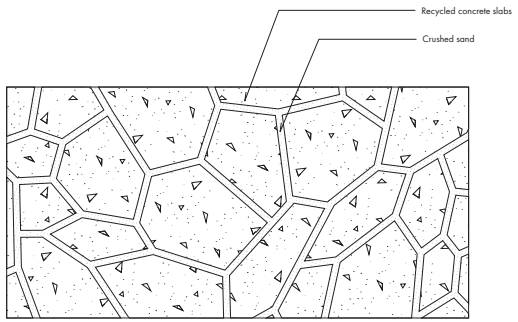
ACTIVITY BOOTHS

SCULPTURE GARDEN



Pond Perspectives - Summer & Winter

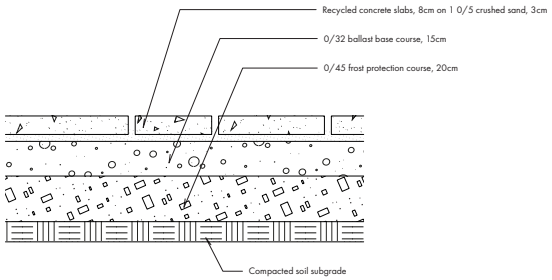
Cambridge Butterfly Conservatory.



PLAN VIEW

1 L5.1 PAVING PATTERN @ PLAZA

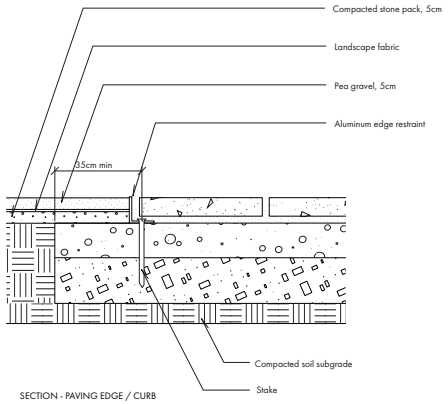
SCALE - 1:10


Recycled concrete slabs, 8cm on 1 0/5 crushed sand, 3cm
0/32 ballast base course, 15cm
0/45 frost protection course, 20cm
Compacted soil subgrade

SECTION - PAVING

2 L5.1 PAVING @ PLAZA

SCALE - 1:10

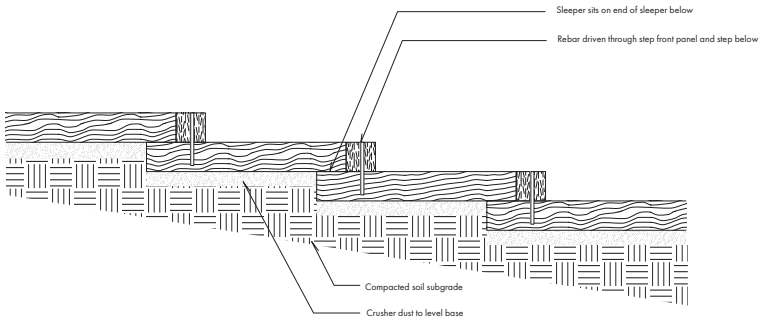


SECTION - PAVING EDGE / CURB

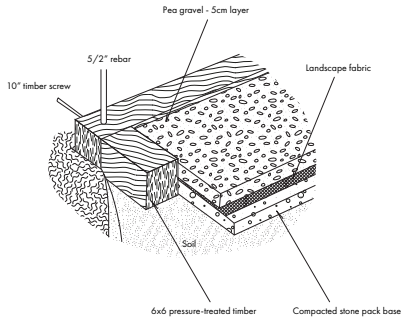
3 L5.1 PAVING CURB @ PLAZA & GRAVEL

SCALE - 1:10

0 50cm 1m


Sleeper sits on end of sleeper below
Rebar driven through step front panel and step below
Compacted soil subgrade
Crusher dust to level base

SECTION - EDGE OF STAIRS



SECTION - STEP TRENCHES

4 L5.1 AMPHITHEATRE STAIRS

SCALE - 1:10

0 50cm 1m

EXAMPLE OF RECYCLED CONCRETE PAVERS

EXAMPLE OF GRAVEL STEPS

No.	Revision	Date	By

CAMBRIDGE Butterfly CONSERVATORY

BUTTERFLY POND AND GARDEN

2500 Kossuth Rd, Cambridge, ON N3H 4R7

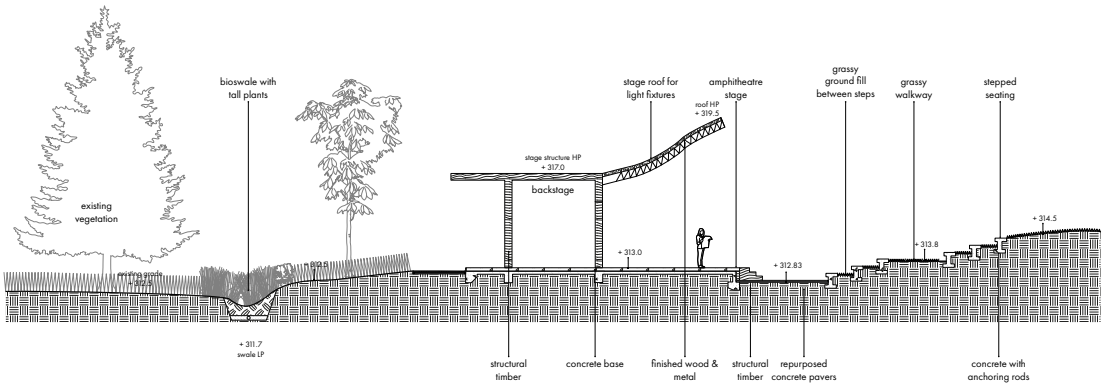
LARC 6040 JENNIFER'S FIRM

DRAWING TITLE:	Paving Detail
JOB NO.:	1
DATE:	Mar 21, 2022
DRAWN BY:	JW
CHECKED BY:	-
SCALE:	1:3000

Sheet number

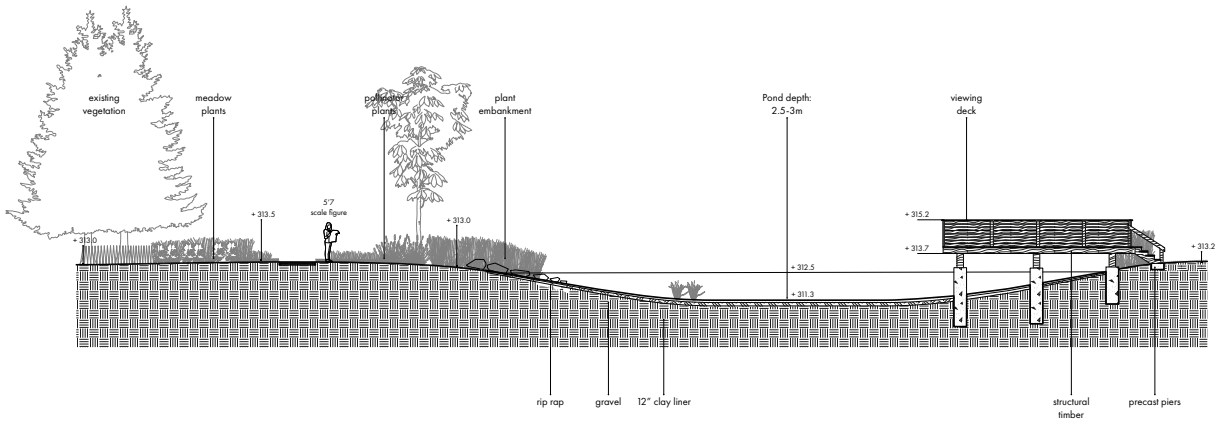
L5.1

Technical Drawings Sample - Paving Detail



A L4.1 AMPHITHEATRE SECTION

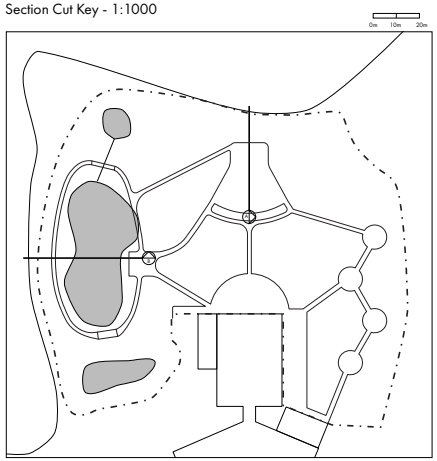
SCALE - 1:100



B L4.1 POND SECTION

SCALE - 1:100

Section Cut Key - 1:1000



Section 1+2 Materials Schedule

WOOD
Structural Timber - SPF (Spruce pine fir)
Stage surfaces - exterior-grade plywood (EN 13986)

CONCRETE
Amphitheatre seating - WU (watertight concrete)
Concrete pavers - recycled concrete slabs
Stage foundation - vacuum concrete
Concrete deck piers - precast concrete units

METAL
Theatre roof structure - steel with weatherproof aluminum finish
Anchoring thread - steel threaded rod

POND
Clay liner - natural clay
Gravel
Stone riprap

Section1+2 Plant List

MEADOW & POLLINATOR PLANTS
Purple coneflower - Echinacea purpurea
Goldenrod - Solidago spp.

SWALE PLANTS
Canada anemone - Anemonastrum canadense
Canada wild rye - Elymus Canadensis
Common elderberry - Sambucus canadensis

POND ENBANKMENT
Flowering rush - Butomus umbellatus
Bulrush - Schoenoplectus spp.

AQUATIC PLANTS
White water lily - Nymphaea alba
Hornwort - Caratophyllum demersum
Japanese iris - Iris laevigata

TREES (proposed only)
Silver maple - Acer saccharinum
Weeping willow - Salix babylonica

No.	Revision	Date	By

CAMBRIDGE BUTTERFLY CONSERVATORY

CAMBRIDGE BUTTERFLY CONSERVATORY

2500 Kossuth Rd, Cambridge, ON N3H 4R7

LARC 6040 JENNIFER'S FIRM

DRAWING TITLE:	Sections
JOB NO.:	1
DATE:	Feb 14, 2022
DRAWN BY:	JW
CHECKED BY:	-
SCALE:	1:100

Sheet number

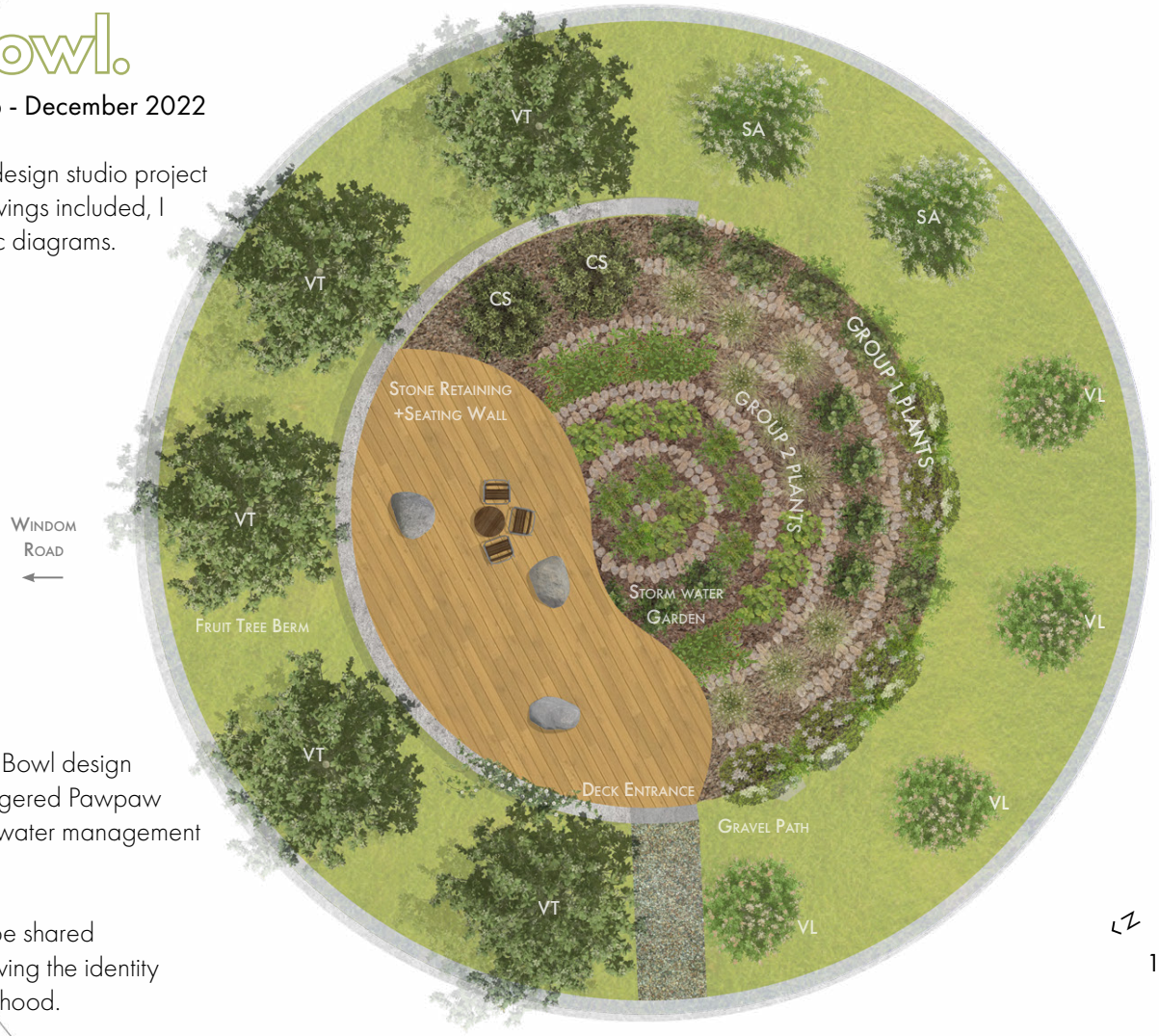
L4.1

Technical Drawings Sample - Structural Detail

windom bowl.

drainage bulb redesign - group - December 2022

This project is an environmental design studio project done in groups of 2. Of the drawings included, I made the plans and axonometric diagrams.

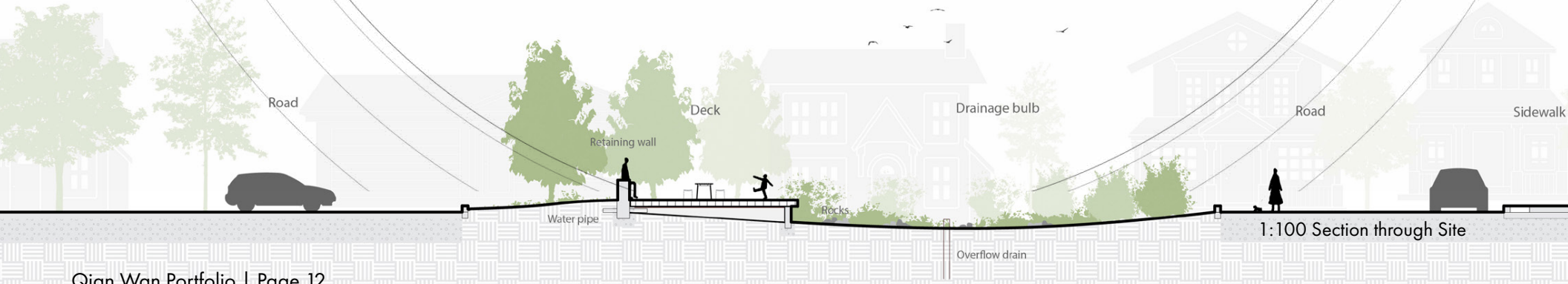


Project Statement: The Windom Bowl design celebrates the native and endangered Pawpaw tree, while also improving storm water management for the City of Kitchener.

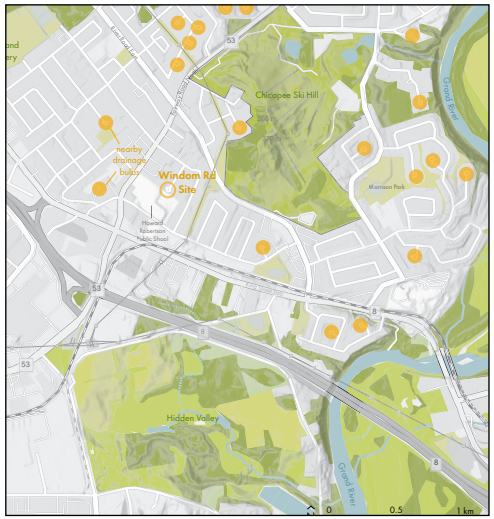
Like a fruit bowl, the space can be shared throughout the community, improving the identity and stewardship of the neighborhood.

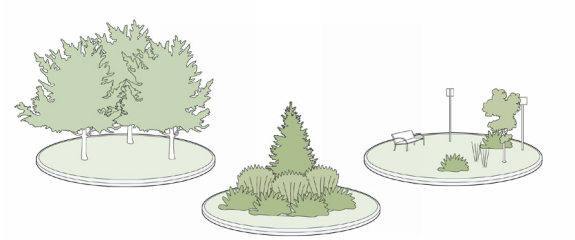
0 1 5m

1:100 Windom Landscape Plan

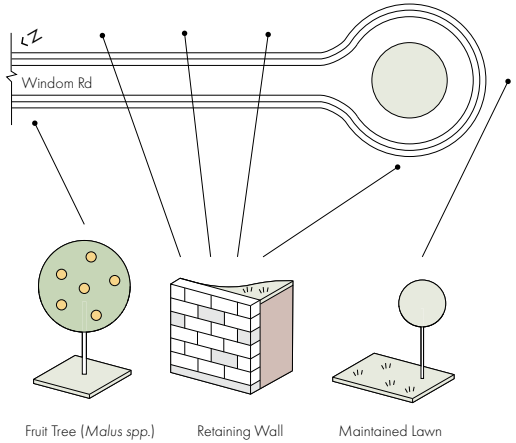


1:100 Section through Site

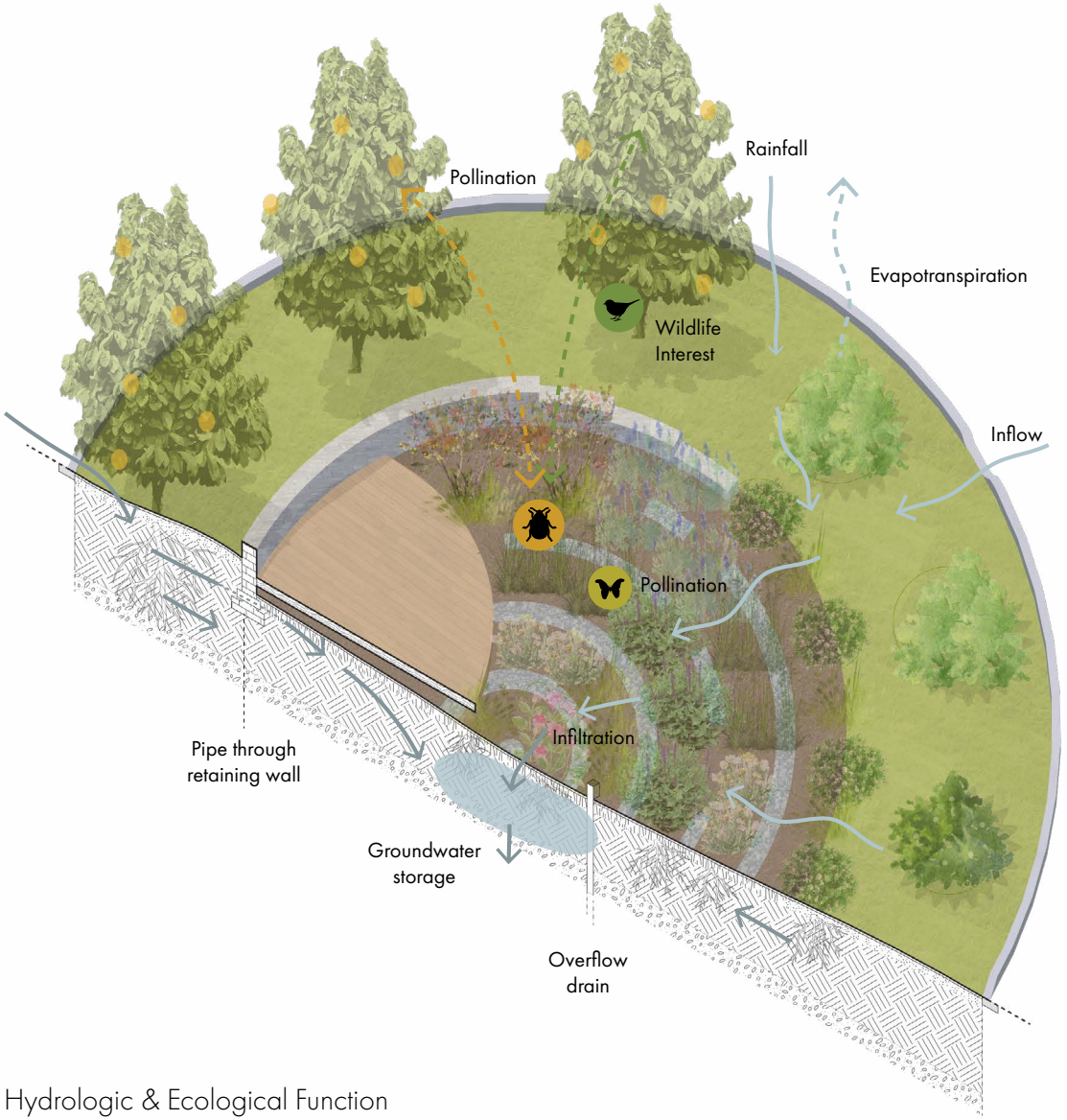




Existing Local Drainage Bulbs



Windom Rd Bulb Neighborhood Elements



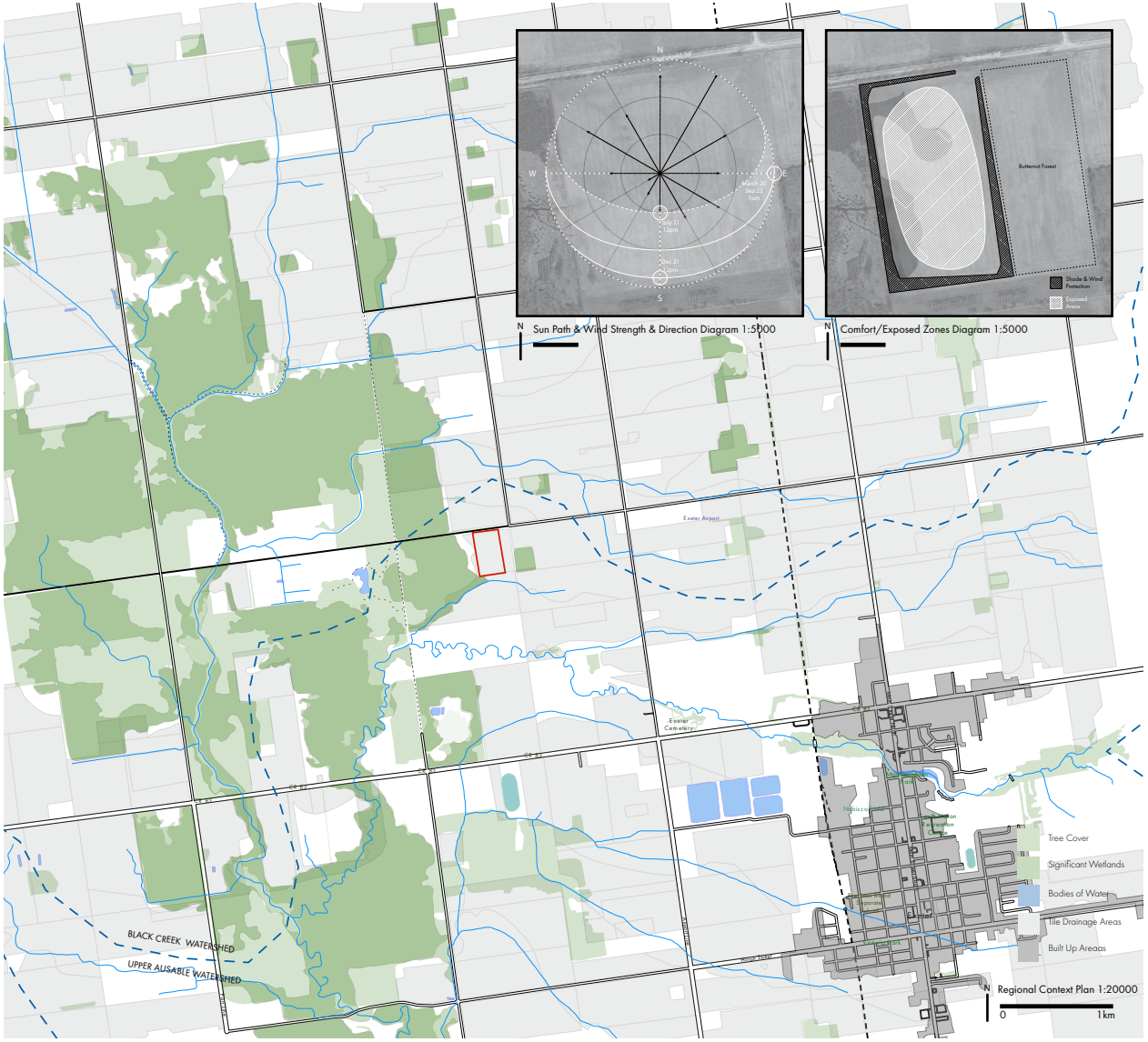
Hydrologic & Ecological Function

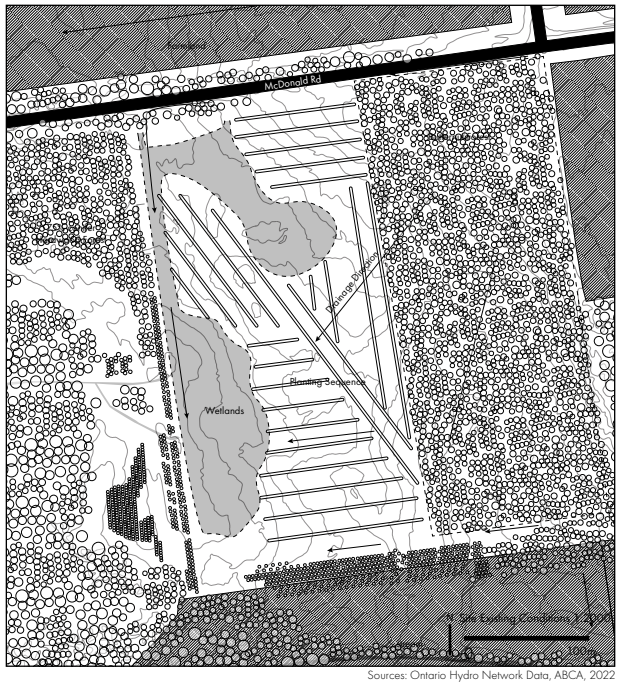
Inflow water is fed into the bowl, filtering and mitigating storm water flow.

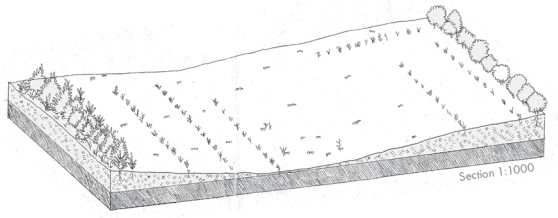
Beetle habitat is provided by stones, mulch and other organic material ensuring that the Pawpaws are pollinated.

Treibner Tract wetland rehabilitation.

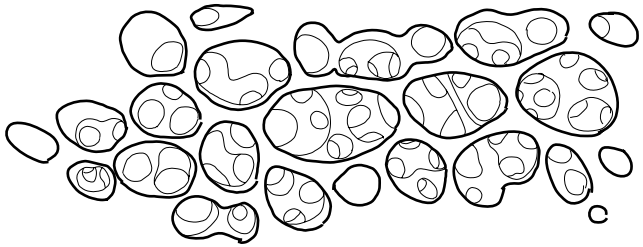
wetland conservation - individual - October 2022





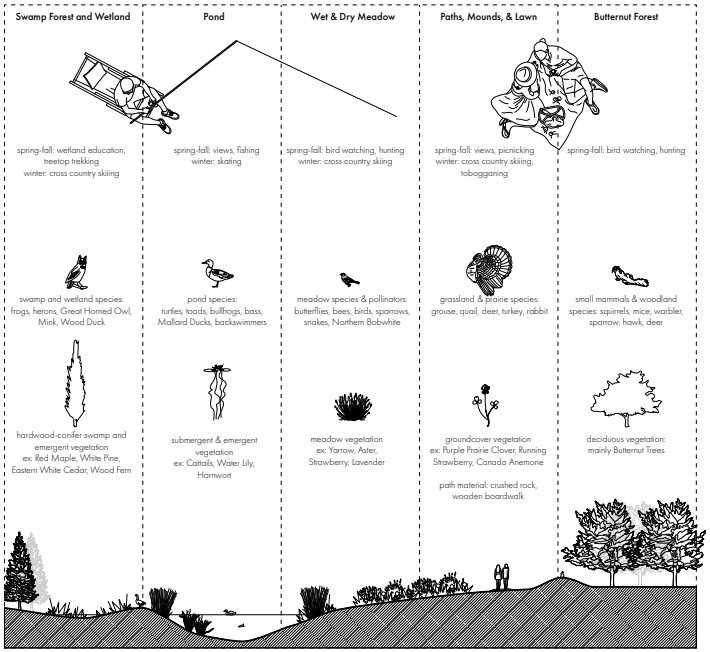


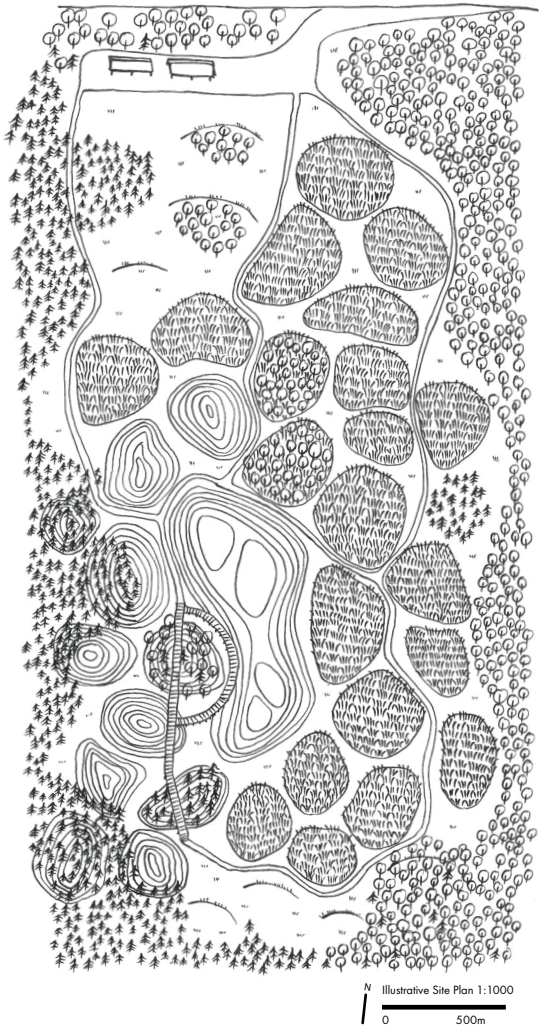
The project site, owned by ABCA, is located in the transition zone of Black Creek and Upper Ausable sub-watersheds in the Huron County, It is on the edge of a series of significant wetlands and in an area of agricultural use.

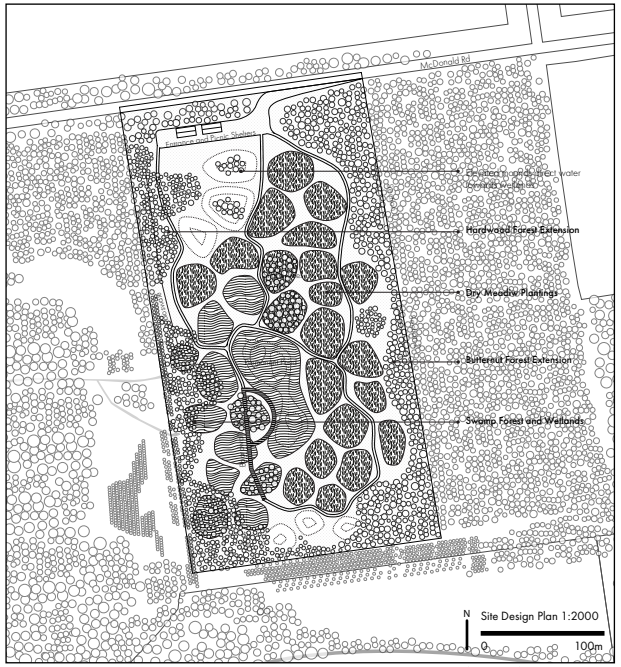


Concept Diagram - karst geography ^

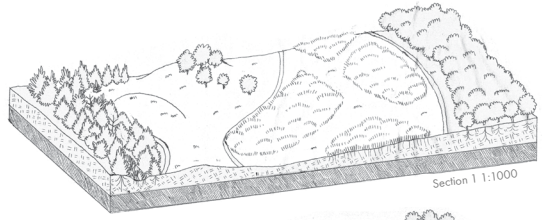
Ecology & Programming Diagram v

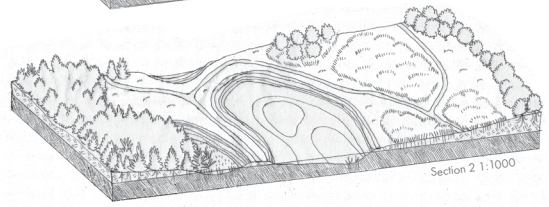

Swamp Forest and Wetland
Pond
Wet & Dry Meadow
Paths, Mounds, & Lawn
Butternut Forest
spring-fall: wetland education, treetop trekking
winter: cross country skiing
spring-fall: views, fishing
winter: skating
spring-fall: bird watching, hunting
winter: cross country skiing
spring-fall: views, picnicking
winter: cross country skiing, tobogganing
spring-fall: bird watching, hunting
swamp and wetland species: frogs, herons, Great Horned Owl, Mink, Wood Duck
pond species: turtles, toads, bullfrogs, bass, Mallard Ducks, backswimmers
meadow species & pollinators: butterflies, bees, birds, sparrows, snakes, Northern Bobwhite
grassland & prairie species: grouse, quail, deer, turkey, rabbit
small mammals & woodland species: squirrels, mice, warbler, sparrow, hawk, deer
hardwood-conifer swamp and emergent vegetation
ex: Red Maple, White Pine, Eastern White Cedar, Wood Fern
submergent & emergent vegetation
ex: Cattails, Water Lily, Hornwort
meadow vegetation
ex: Yarrow, Aster, Strawberry, Lavender
groundcover vegetation
ex: Purple Prairie Clover, Running Strawberry, Canada Anemone
path material: crushed rock, wooden boardwalk
deciduous vegetation: mainly Butternut Trees





Sources: Ontario Hydro Network Data, ABCA, 2022



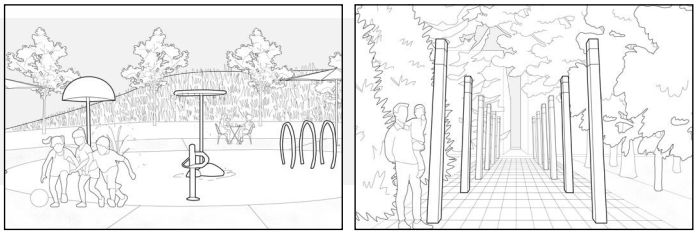


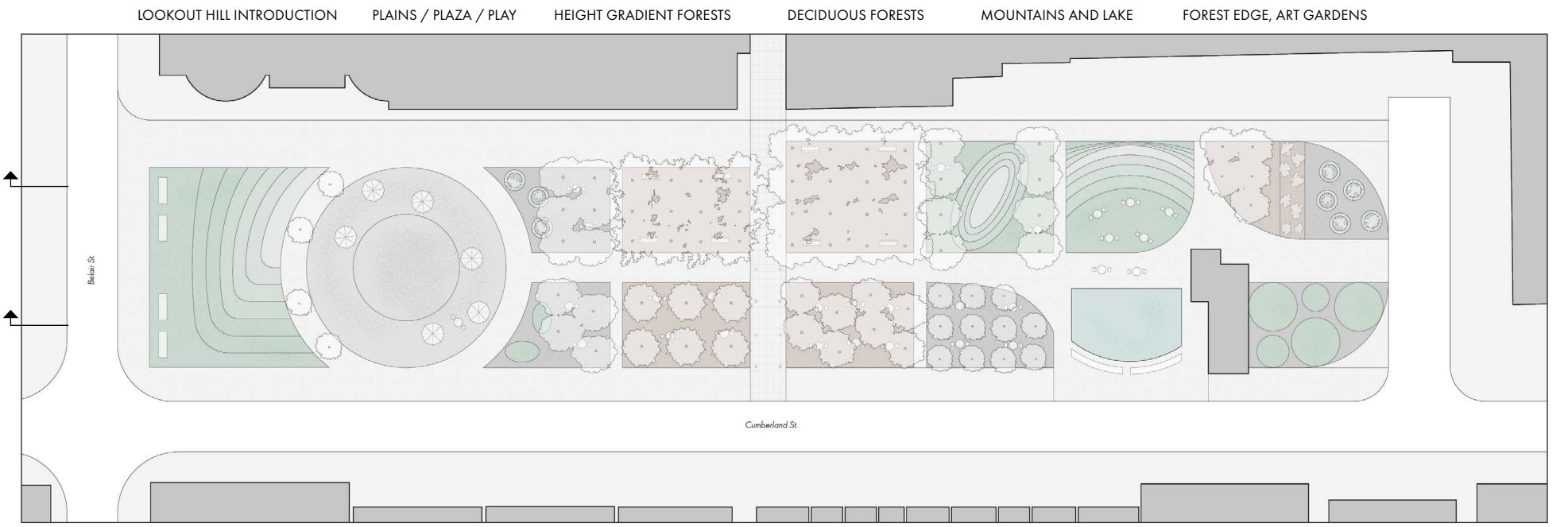
This wetland design is inspired by the clustered structure of a sponge's negative space, which is also reminiscent of the karst geography occurring in the area. The plan involves a clustering of wetlands, meadow plantings, and mounds, responsive to the elevation changes existing on the site. It directs water from the area towards the south-west portion of the site,a swamp forest and wetland. As the site is rehabilitated, the clusters will join together, becoming larger homogenous habitat areas.

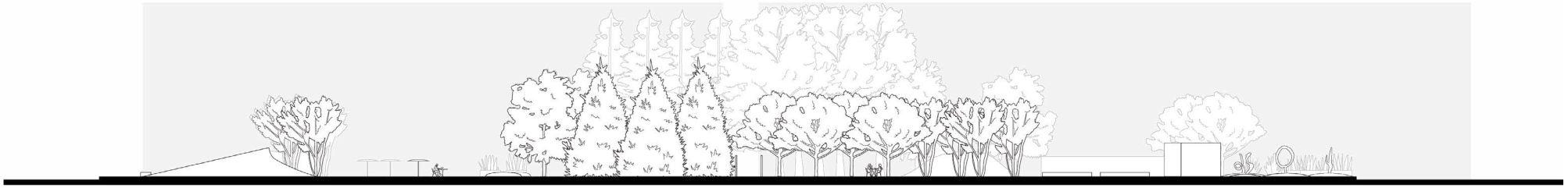
yorkville urban forest.

Yorkville Park Re-design - individual - December 2021

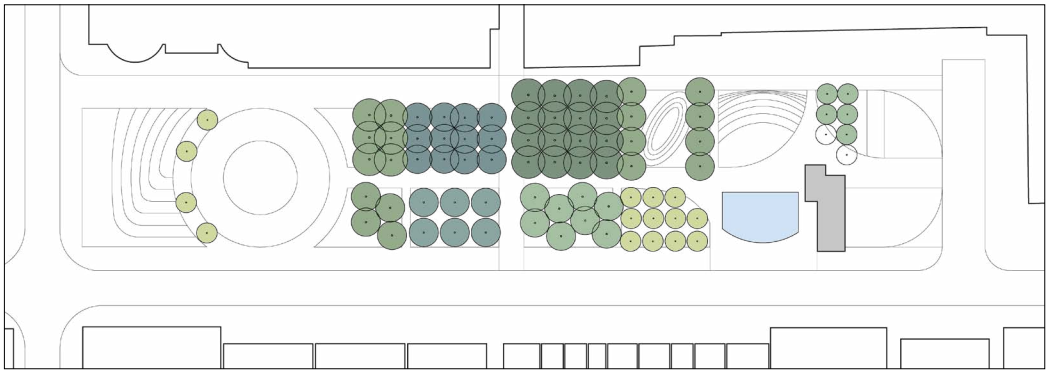
Yorkville Urban Forest is a project that aims to create an immersive forest environment in a dense commercial section of Toront. Contrasting the lateral segmentation of the current Yorkville Village Park, this design has a long path that winds through the space longitudinally, where one experiences gradients of vegetation, density, and height to gradually immerse you into the forest.

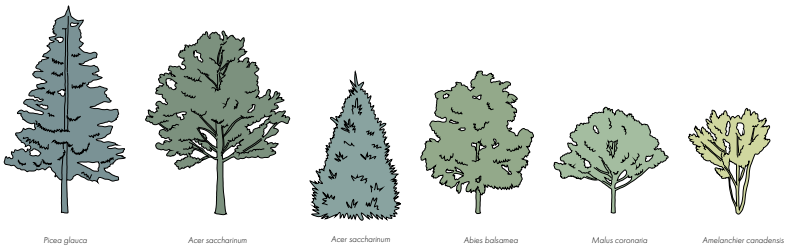


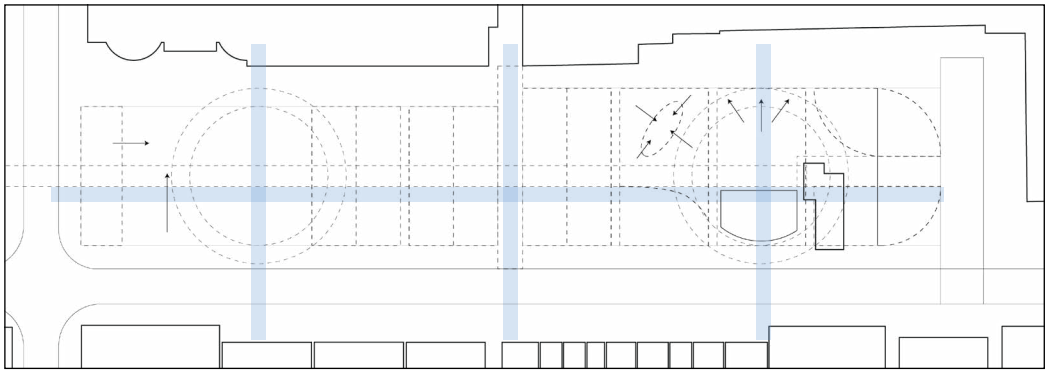


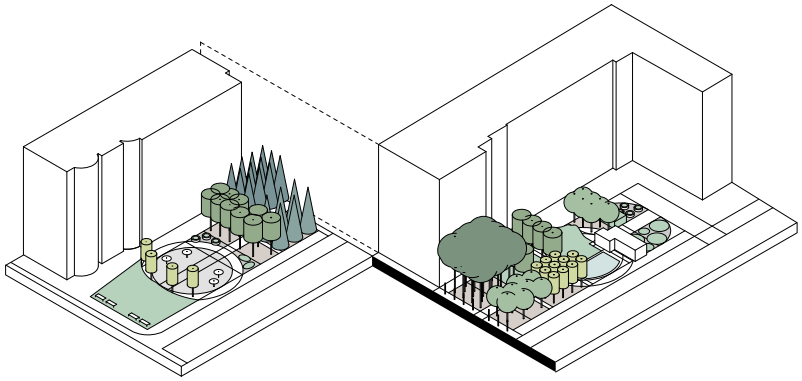


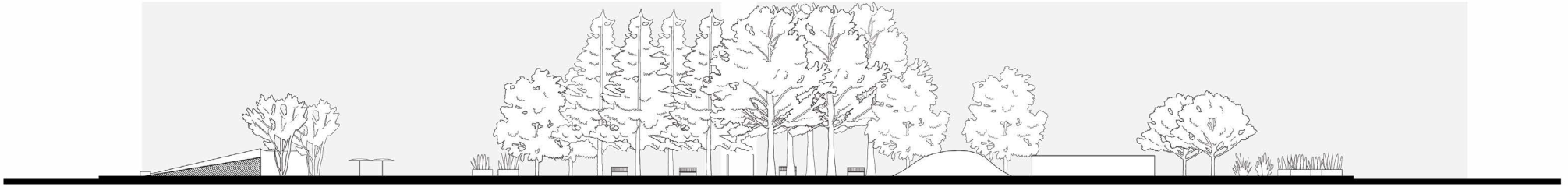
Programming in the park is based on transition from the road, density, and height of elements. Dense forest areas are lined with lamps and benches, while the thinner forests offer gathering spaces and coffee tables. The transitional spaces feature gardens and minor structures as well as shrubs and tall plants that reflect the beginning stages of a forest. The two flat circles offer a water feature that becomes a skating rink in winter, as well as a large plaza with opportunity for small gatherings and a splashpad for children.





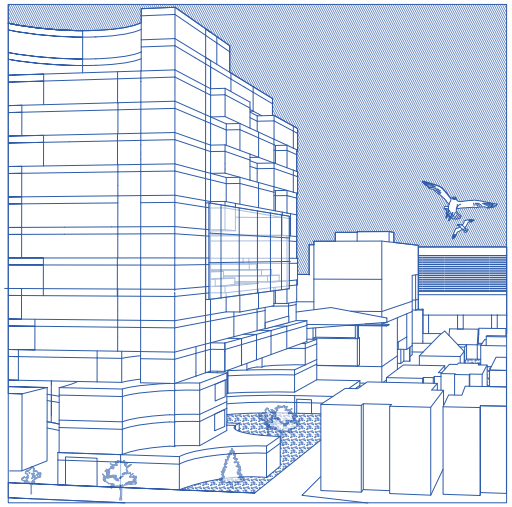


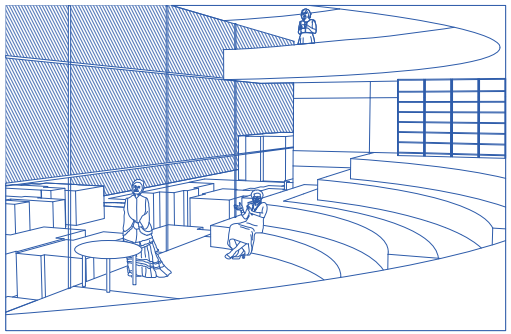




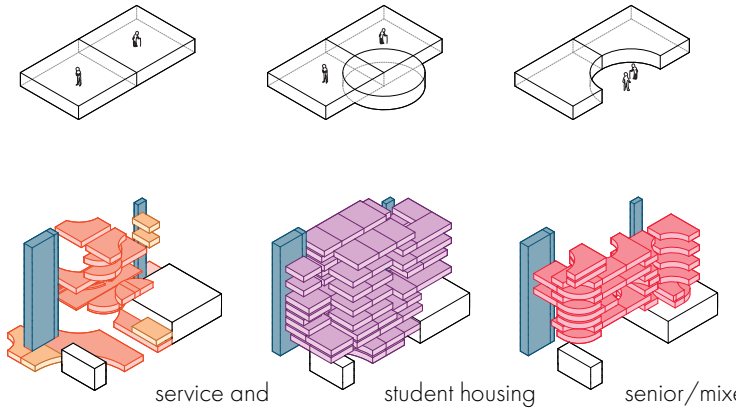
social circles.

mixed demographic housing project - individual - April 2020





Creating spaces of social connection, rest, and harmony between students and seniors through circular form. Social Circles is a mixed housing project that aims to unite two demographics: students and seniors, through their common need for social spaces and rest. The circles create common areas, like libraries, study rooms, and cafes.
The site is on Spadina Avenue next to UofT's Alumni Hall.

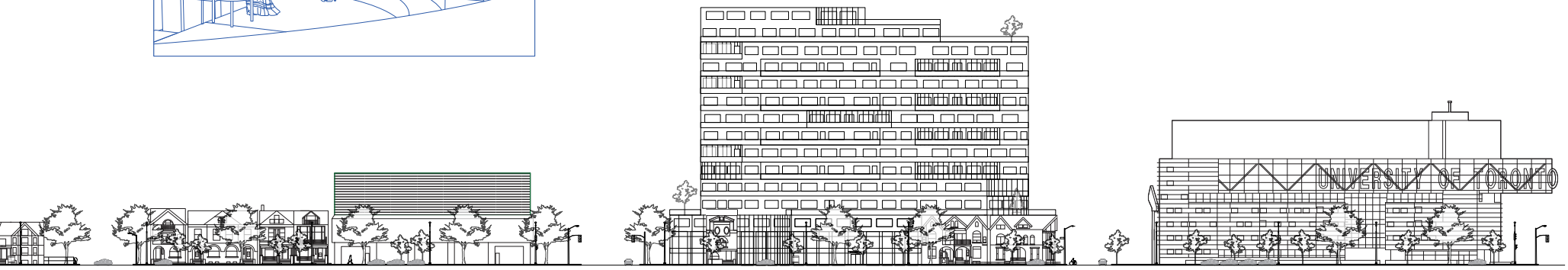


service and common areas

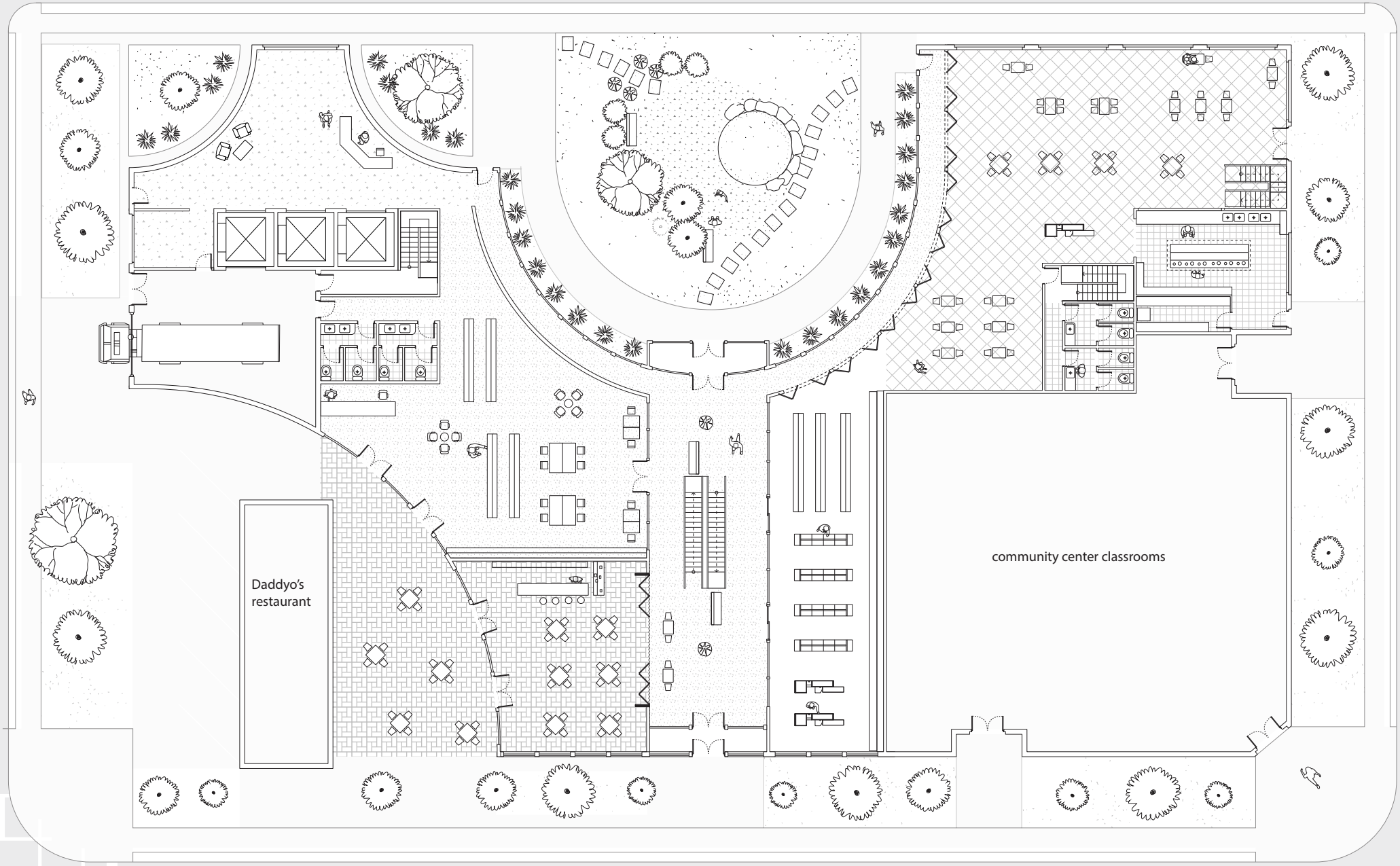
student housing

senior/mixed housing

Figure-Ground Plan

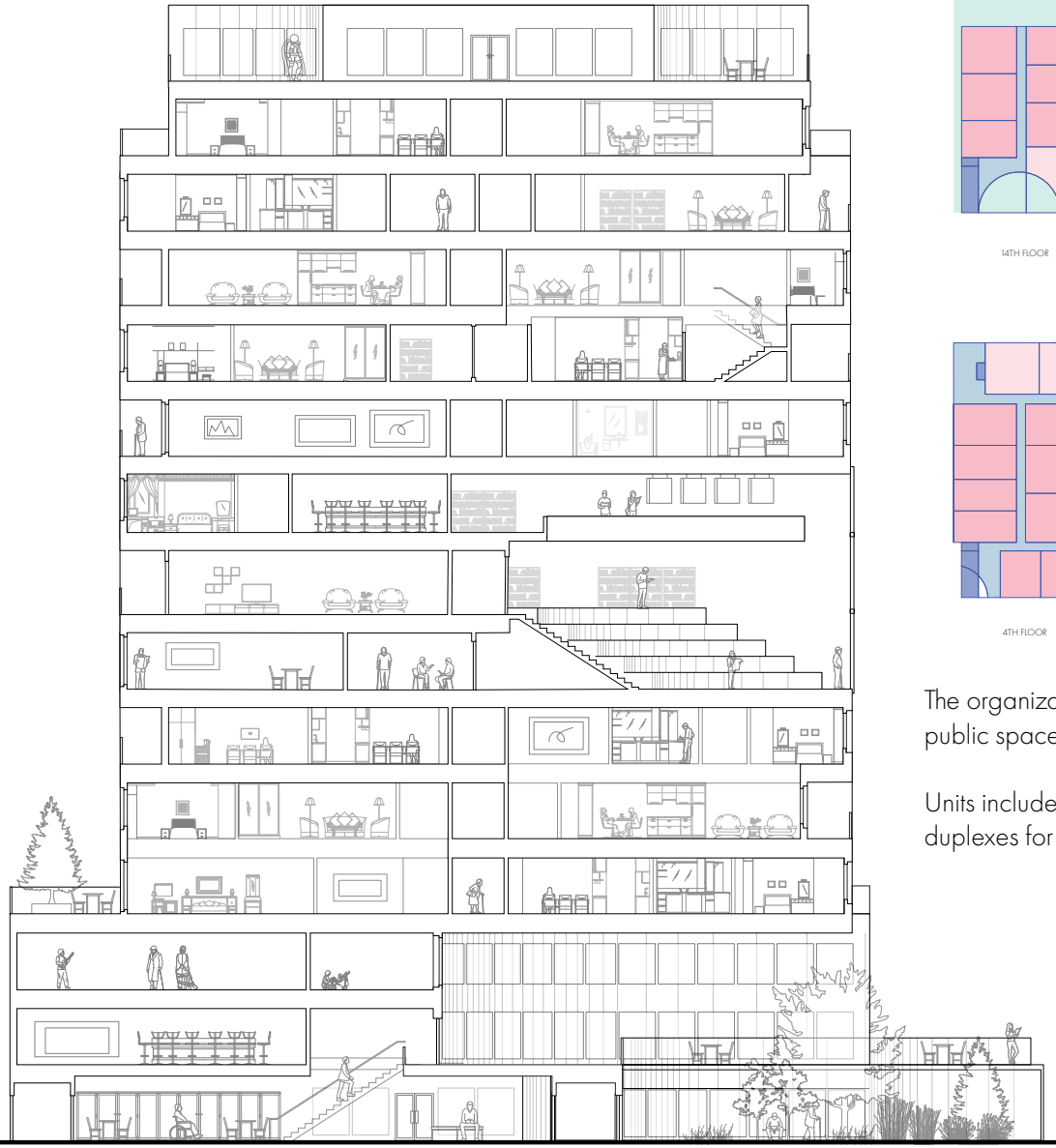


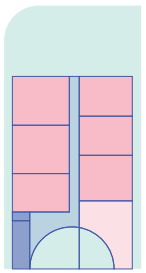
Spadina Avenue Section



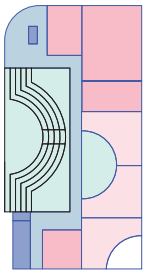
Ground Floor Plan

social circles.

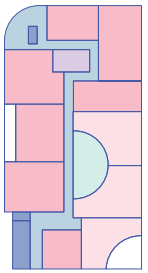




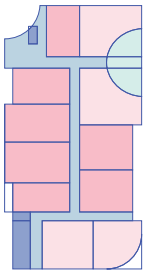
14TH FLOOR



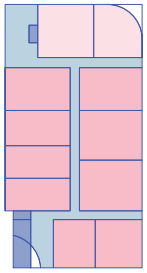
7TH FLOOR (LIBRARY)



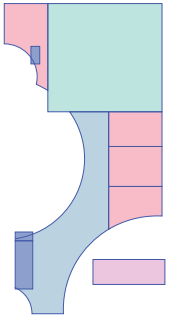
TYPICAL ODD NUMBER



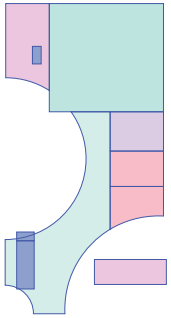
TYPICAL EVEN NUMBER



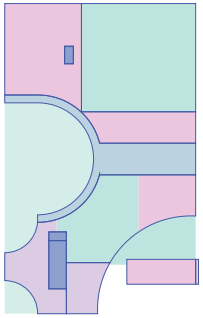
4TH FLOOR



3RD FLOOR



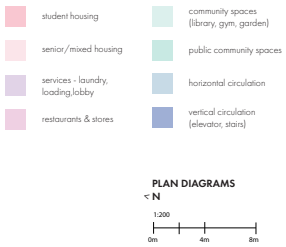
2ND FLOOR



GROUND FLOOR

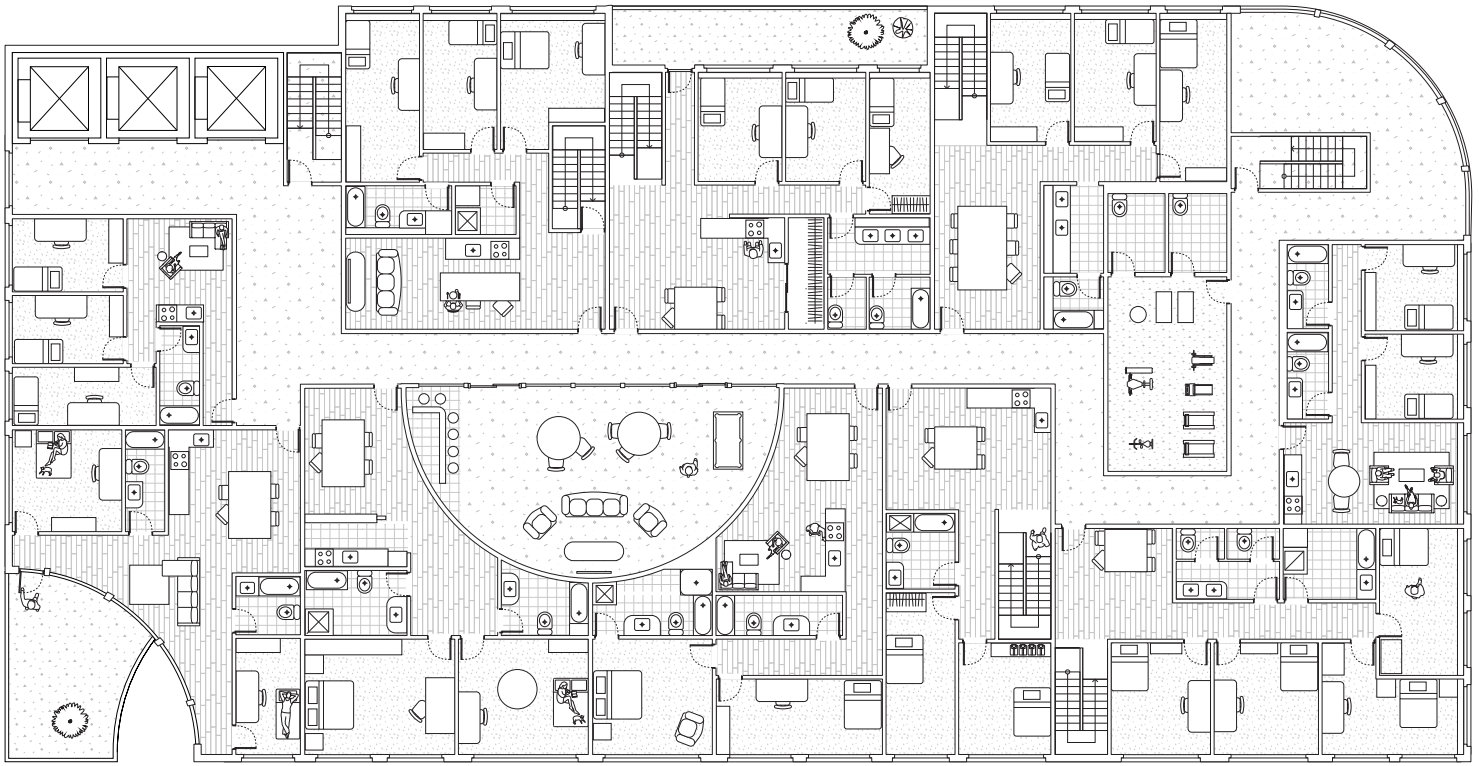
The organization of floors in the building allow creation of public space in negative spaces, inspired by Bofill's Walden 7.

Units include large 2 bedroom units and 4-6 bedroom duplexes for students.

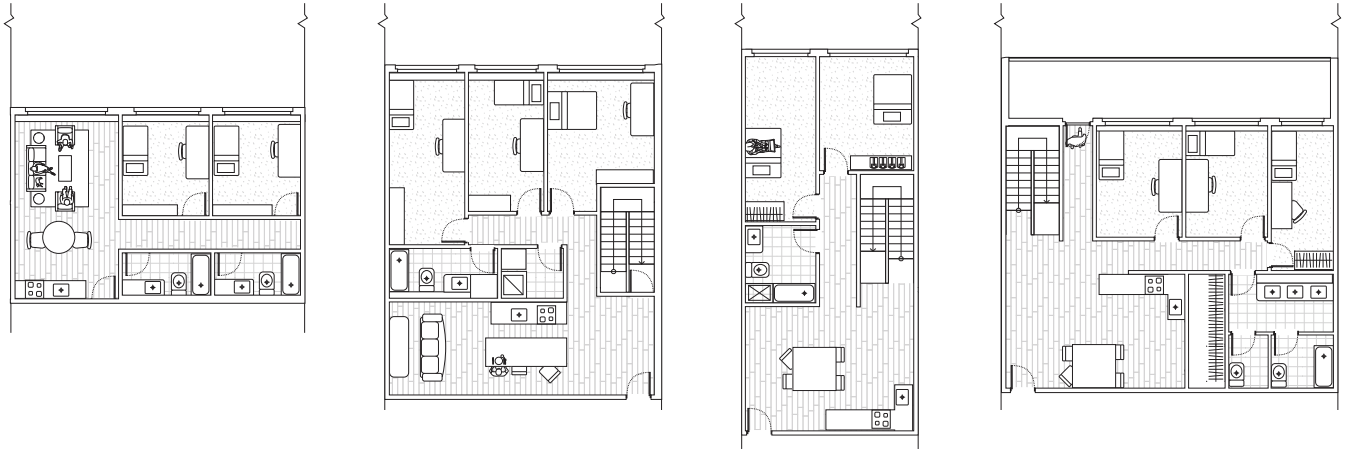


PLAN DIAGRAMS

CROSS-BUILDING SECTION



Typical Floor Plan



SINGLE FLOOR UNIT
2-3 BED ROOMS

TWO-LEVEL DUPLEX SEGMENTS
4-6 BEDROOMS

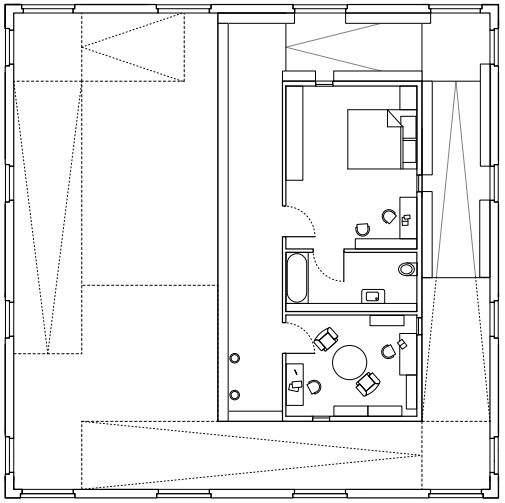
Student Units

Rathnelly House.

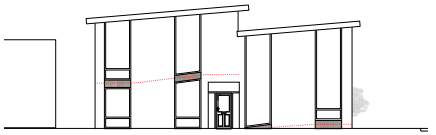
single family housing project - individual - December 2019

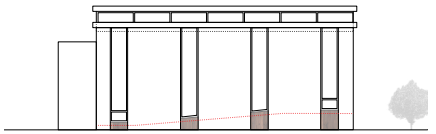
In this course, we were able to choose two different characters who would live in a house together, situated in Midtown, Toronto. I chose a married couple: a writer with 3,500 books and a councillor who uses a wheelchair.

Perspectives & Context, Rathnelly Avenue

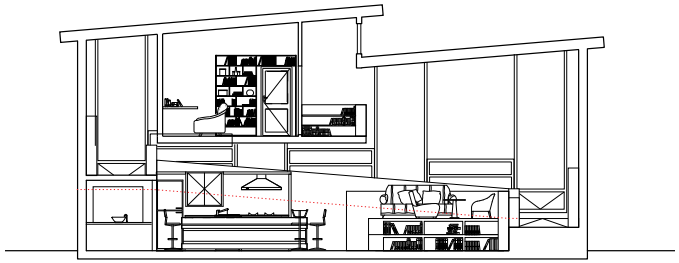


Second Floor

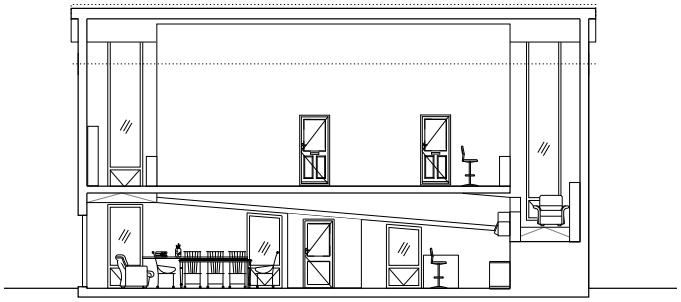




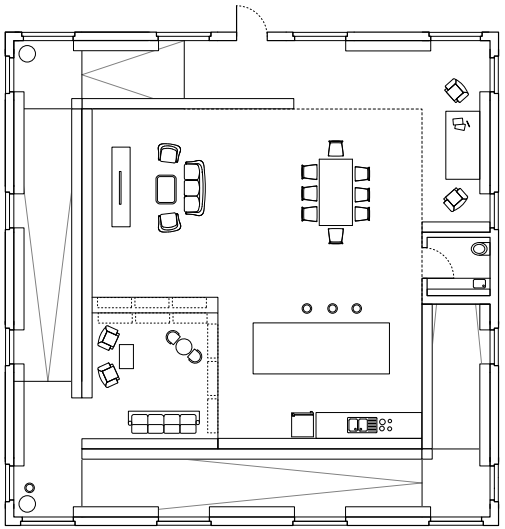
A



Section B

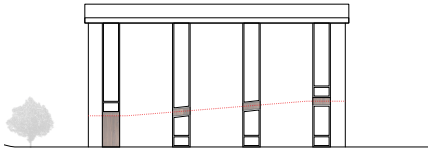


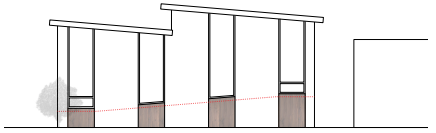
Section A



B

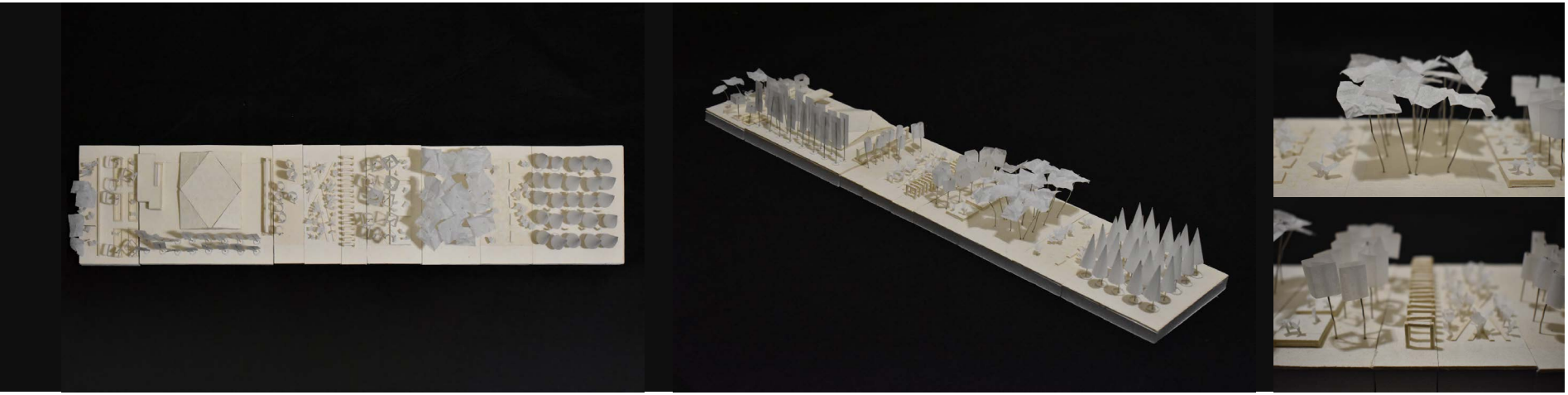
Ground Floor



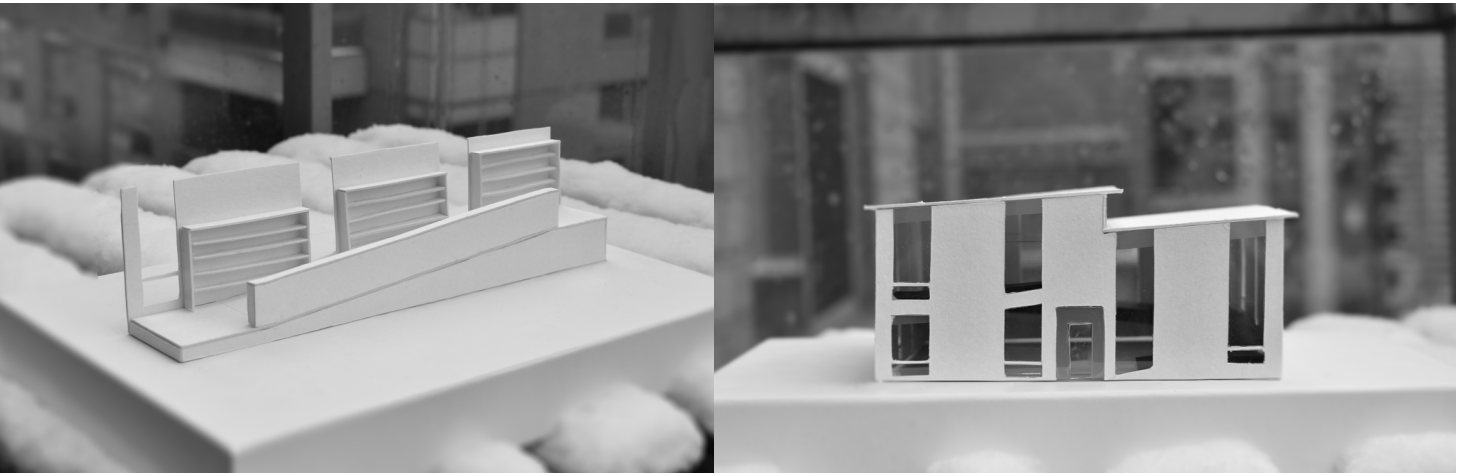


Elevations

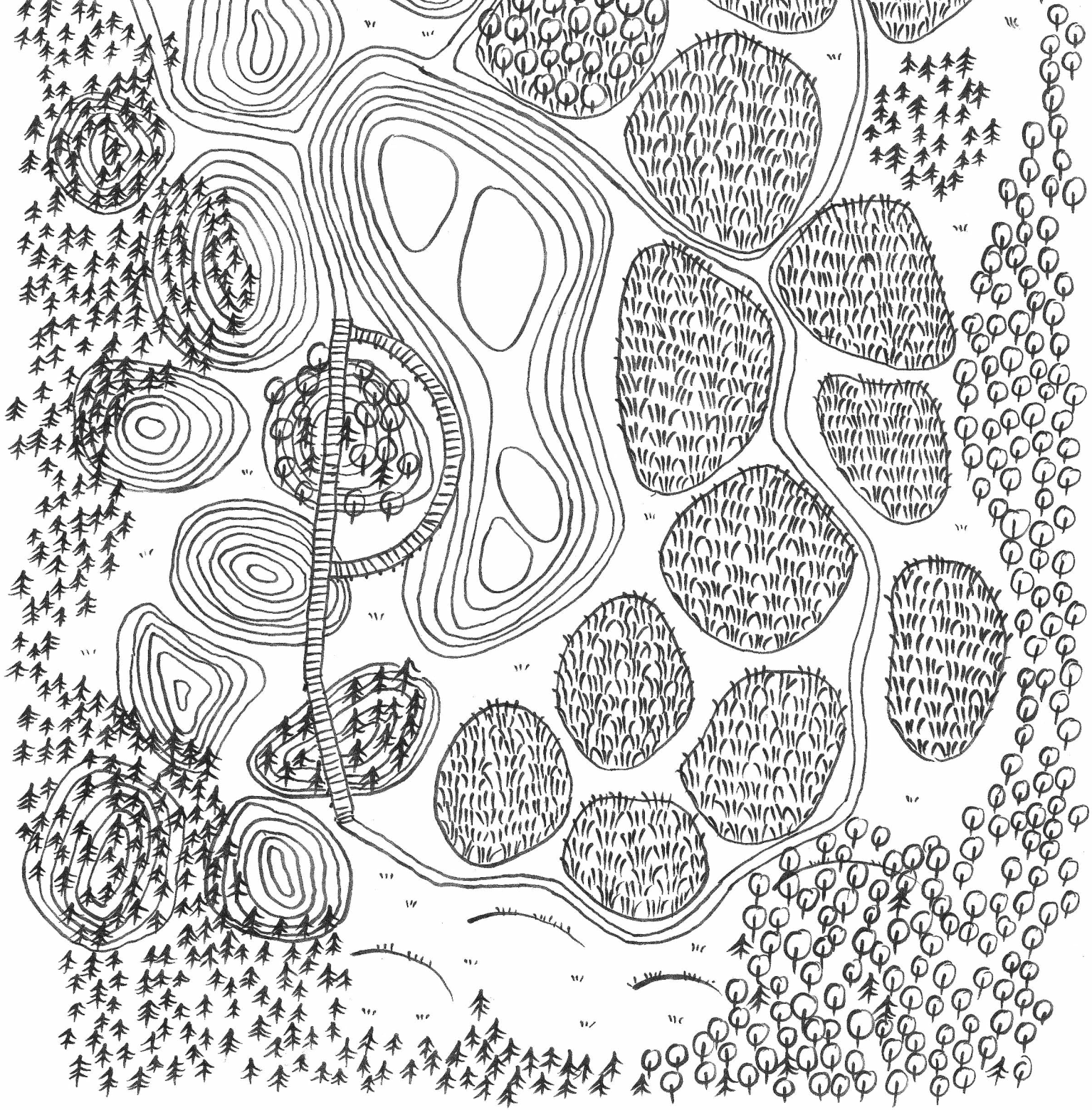
physical models.



Yorkville Village Park in segments
museum board, trace paper,paper clips



Rathnelly House ramp structure and stair detail
museum board, foam core



thanks for reading!